

Engle Case

PM3003572279

Engle Case: Cummings Testimony

Causal

16425: 10
16569:1, 2
16594:24
16595:1,9
16596:4
16597:6
16598:25

Causally

16505:17

Causation

16277:11, 13, 17, 21
16312:15
16354:19, 23
16355:2
16417:11,12
16418:17
16436:20
16437:23
16438:21-22
16442:23
16530:7, 15

Caused:

16602:17
16608:1
16609:22

Causes

16594:18
16595:13
16598:2
16602:24
16609:23
16630:23
16650:2
16699:24

1 (Whereupon, the following proceedings were had:)
 2 THE COURT: Good morning, all. Have a seat,
 3 please. I see everybody made it back in time.
 4 Okay. What do we have this morning?
 5 MR. ROSENBLATT: Well, I wanted to check on
 6 the status of what we discussed at sidebar on
 7 Wednesday.
 8 THE COURT: Give me a clue, a key word or
 9 something. I'll remember it.
 10 MR. ROSENBLATT: Ad campaign, national ad
 11 campaign.
 12 THE COURT: Okay. Got it. We discussed so
 13 many things sidebar.
 14 Yes, you were supposed to make a report.
 15 MR. HEIM: I have no report as of yet, but
 16 I'm working on it.
 17 MR. ROSENBLATT: Well, I just don't want to
 18 have a situation where I pick up a paper one day and
 19 there is a full-page ad in it.
 20 MR. HEIM: Judge, I'm expecting to have a
 21 report shortly. It takes a while to get this. But I'm
 22 working on it, and I will have a report.
 23 THE COURT: Okay. I didn't expect things
 24 would happen, especially over the holiday, that quick.
 25 Somebody is going to have to be at work in the office

1 and do whatever it is they have to do. So do whatever
 2 you can.
 3 All right. What else do we have this
 4 morning?
 5 MR. NEWSOM: We have several things to take
 6 up before Dr. Cummings testifies.
 7 First, yesterday we saw for the first time --
 8 THE COURT: Is the doctor here?
 9 Would you step outside for just a moment,
 10 please, sir?
 11 (Dr. Cummings left the courtroom.)
 12 MR. NEWSOM: We were told last Wednesday, and
 13 yesterday we saw for the first time, about 50 or so
 14 slides that he proposes to use during his testimony.
 15 Most of the slides are objectionable for
 16 various reasons, and we want to be sure that we can
 17 either take up the slides now and go over them so we
 18 can determine the objections before they're shown to
 19 the jury, or as we go along, before any slide is shown
 20 to the jury, that we have an opportunity to object.
 21 Because if it's shown to the jury, it's too late.
 22 THE COURT: Okay. Now, he is a what?
 23 MR. ROSENBLATT: He is a Ph.D. He is a
 24 cancer research specialist at Roswell Park Cancer
 25 Institute in Buffalo, which is probably the oldest

1 comprehensive care center in America.
 2 THE COURT: His specialty is what?
 3 MR. ROSENBLATT: Cancer, cancer research.
 4 His degree is in health behavior. He testified in the
 5 Broin case.
 6 THE COURT: I don't care where he testified.
 7 The point is, his expertise is --
 8 MR. ROSENBLATT: His expertise is in tobacco.
 9 His expertise is -- and he's run smoking cessation
 10 courses for over 14 years. His expertise is basically
 11 in everything relating to tobacco and health.
 12 THE COURT: All right. What would the slides
 13 be about?
 14 MR. ROSENBLATT: Your Honor, I don't intend
 15 to get into the slides right away. And at some point
 16 we will take a break and go through them, and I will
 17 have him explain them to you, what they are.
 18 THE COURT: Okay. Because I really don't
 19 want the jury to be sitting in there and waiting.
 20 MR. NEWSOM: The slides involve a wide
 21 variety of topics: Eclipse cigarettes, Accord
 22 cigarettes. There are pictures of ads, pictures from
 23 articles. There are quotes from documents that are not
 24 in evidence.
 25 THE COURT: All right. Let's get the

1 foundation laid first and then we will go into that.
 2 It's easier if I go ahead and find out what he is all
 3 about, then we can take a break and find out what the
 4 testimony and the slides are going to be all about.
 5 Right now I have no idea what he's going to testify
 6 about, so it's hard to talk about the slides.
 7 So let's go ahead, and with counsel's request
 8 that we take the break at the appropriate time, then we
 9 can do that.
 10 MR. NEWSOM: Okay. I'm not sure if they
 11 propose to have Dr. Cummings testify on causation
 12 issues. He's listed in his disclosure as possibly
 13 testifying about causation. But each of the diseases
 14 he would propose to testify about, they've had three,
 15 four, five, six, eight other witnesses already testify
 16 about those same diseases. So his testimony with
 17 respect to any causation issue would be cumulative.
 18 THE COURT: What about that?
 19 MR. ROSENBLATT: We don't agree that it's
 20 cumulative, but we do not intend to have him address
 21 causation specifically.
 22 THE COURT: Okay.
 23 MR. NEWSOM: And then we have gotten a list
 24 of documents that he says he relies on. None of those
 25 documents have been admitted in evidence, have not been

1 discussed on document objection days and so forth.
 2 Each of those will have to be taken up I guess as they
 3 come up, because they were not previously made.
 4 THE COURT: I guess so. When they come up,
 5 they come up.
 6 MR. NEWSOM: I think Mr. Moodhe has --
 7 MR. MOODHE: I don't know to what extent
 8 Dr. Cummings is going to be testifying about CTR today,
 9 but I do know Dr. Cummings is aware of the status of
 10 CTR being in dissolution. And given the agreement of
 11 counsel before, I would want that undertaken again,
 12 that Dr. Cummings will not volunteer that information
 13 to the jury absent the --
 14 THE COURT: I lost you someplace. CTR is
 15 dissolved?
 16 MR. MOODHE: Is in dissolution pursuant to
 17 court-ordered settlement.
 18 THE COURT: That's a settlement issue?
 19 MR. MOODHE: Right.
 20 THE COURT: I think counsel knows not to get
 21 into it. He's aware of it himself, is he not?
 22 MR. MOODHE: I don't know that the doctor is
 23 aware of the instruction not to address it, and that
 24 was my concern.
 25 THE COURT: Okay. If you want to discuss it

1 with him, you can do so.
 2 MR. ROSENBLATT: I will. I'll simply mention
 3 it again, not to mention the present status of CTR.
 4 He's going to talk about CTR, but I will caution him
 5 again not to volunteer that they are being dissolved
 6 pursuant to a settlement.
 7 THE COURT: All right.
 8 You can bring the jury out, then.
 9 THE BAILIFF: Bringing in the jury.
 10 (The jurors entered the courtroom.)
 11 THE COURT: Good morning, folks.
 12 JURORS: Good morning.
 13 THE COURT: Have a seat, please.
 14 Everybody enjoy your holiday?
 15 JURORS: Yes.
 16 THE COURT: Anybody watch anything on TV.
 17 read anything in the papers, TV, otherwise, any
 18 discussions with anybody about the case or any of the
 19 issues involved?
 20 JURORS: No, sir.
 21 THE COURT: I guess we can proceed.
 22 MR. ROSENBLATT: Dr. Cummings?
 23 Thereupon:
 24 KENNETH MICHAEL CUMMINGS, Ph.D.
 25 having been called as a witness, was duly sworn,

1 examined, and testified as follows:
 2 DIRECT EXAMINATION
 3 BY MR. ROSENBLATT:
 4 Q. Dr. Cummings, please tell the members of the
 5 jury your full name and your present address.
 6 A. It's Kenneth Michael Cummings. I live at 30
 7 Columbine Drive in Williamsville, New York.
 8 Q. Now, you are a Ph.D., that's why I'm calling
 9 you doctor. You are not an M.D.?
 10 A. That's correct.
 11 Q. Now, going backwards in time, you received
 12 your Bachelor of science degree in health education
 13 from not the University of Miami, Miami University in
 14 Oxford, Ohio.
 15 Tell us what the field of health education
 16 entails.
 17 A. Well, I was trained actually to be a health
 18 teacher, to do teaching of health education in public
 19 schools, and so I had a lot of background in biology,
 20 chemistry, aspects of first aid, you know, all the --
 21 the whole realm of coverage of things that are
 22 generally taught in a school curriculum relative to
 23 health, also physical education.
 24 Q. Okay. And then you received a Master's
 25 degree also in health behavior; is that correct?

1 A. That's correct. This was at the University
 2 of Michigan, Master's of public health. It was the
 3 department of health education and health behavior.
 4 Basically that was a degree in more of psychology of
 5 consumer behavior related to health.
 6 And the training in School of Public Health
 7 is for people who are going to go work in the health
 8 department, county health department or state health
 9 department. And I spent two years at the University of
 10 Michigan getting my Master's in public health and took
 11 courses in epidemiology, statistics, psychology, survey
 12 research methods, consumer behavior, communications.
 13 Q. When you started the program toward obtaining
 14 your Master's degree, did you have in mind at that time
 15 that you were going to go forward and get a Ph.D.?
 16 A. No. It was actually while I was doing my
 17 Master's, I got interested in some of the research work
 18 that some of my professors were involved in, and had an
 19 opportunity, because I had done rather well as a
 20 graduate student and received a scholarship from the
 21 University of Michigan to continue on for my Ph.D.,
 22 which I did over about a three and a half year period.
 23 Q. So you remained at the University of Michigan
 24 both to get your Master's and then your Ph.D., correct?
 25 A. That's right.

1 Q. Okay. Now, what did you do basically as a
2 professor or teacher with your degree in public health
3 after you received your Ph.D.?

4 A. Well, the first job -- actually, as I was
5 finishing up my Ph.D., I worked at Wayne State
6 University in the medical school there teaching a
7 course in program evaluation. I was doing work on
8 actually blood pressure control, was a big issue.
9 Wayne State is located in Detroit, and got involved
10 with a group of public health people who were involved
11 in doing basically hypertension control.

12 We did a massive survey in the city of
13 Detroit where we actually went and randomly selected
14 households, and then individuals within households, to
15 measure how many people had hypertension, which
16 required actually going out and doing a blood pressure
17 measurement, asking a series of questions.

18 It was quite a large project. It was funded
19 by the National Heart, Lung and Blood Institute. That
20 sort of paid the bills.

21 I taught some courses there at Wayne State
22 for about a year and was offered an opportunity to go
23 to the Roswell Park Cancer Institute in Buffalo, where
24 I've been for the past 18 years.

25 Q. Now, you've been at the Roswell Park Cancer

1 Institute since 1981; is that correct?

2 A. That's correct.

3 Q. Tell us first generally what the -- that's in
4 Buffalo?

5 A. That's right.

6 Q. Okay. Tell us generally speaking what the
7 Roswell Park Cancer Institute is.

8 A. Well, Roswell Park was actually a physician
9 in Buffalo, and he created a hospital for cancer
10 patients. In fact, Roswell Park Cancer Institute,
11 which is a state institution -- beginning in the 1940s
12 the state of New York took over the institute and began
13 funding it. It's an institution and hospital that's
14 dedicated solely to the research and treatment of
15 cancer.

16 It's the oldest cancer research facility in
17 the country. It's one of the largest comprehensive
18 cancer centers in the United States today. We have
19 currently 150 beds, over 1500 employees, 250 or so
20 M.D.s or Ph.D.s. Our M.D.s that come also treat cancer
21 patients, but they're also involved in doing clinical
22 research as well.

23 Roswell Park has a very long history of
24 research in many areas including tobacco. Some of the
25 first early tobacco work was done at Roswell Park.

1 Q. Now, is the Roswell Park Cancer Institute,
2 for example, older than M.D. Anderson in Houston and
3 Sloan-Kettering in New York?

4 A. Yes. We celebrated our 100th year
5 anniversary this year.

6 Q. I see, by your curriculum vitae, you list
7 yourself as a cancer research scientist. So tell us
8 about that. What you are involved in, what you are
9 researching, and what you are hoping to achieve through
10 your research.

11 A. Well, when I came to Roswell Park, I was
12 hired as a cancer research scientist. I also teach
13 graduate courses there. We have a graduate program as
14 part of our program at Roswell Park Cancer Institute.
15 But as a senior research scientist, I'm involved in
16 doing research on causes of cancer, and actually since
17 my area is in health behavior, it's mainly dealing with
18 behaviors that relate to things that people can do to
19 prevent cancer.

20 So not smoking would be one obvious thing.
21 But also, you know, early detection of cancer, cancer
22 screening, identification of symptoms, participation in
23 clinical trials, just general information about what --
24 the causes of cancer, health communication. There is a
25 lot of confusion out there that everything causes

1 cancer, which is not true, and we do know a lot about
2 what causes cancer, and there are areas that we don't
3 know.

4 So we have a whole scope of research that I'm
5 actually now directing, as director of the program, in
6 cancer prevention, epidemiology and biostatistics.

7 Q. Now, you are the director of the smoking
8 control program at Roswell Park. Tell us about that,
9 the smoking control program, and what you do as
10 director.

11 A. Well, Roswell Park has a very, very long
12 history of work in tobacco use. In fact, back in the
13 early 1930s, they started collecting histories on the
14 smoking habits of patients coming into our hospital,
15 which were later published as demonstrating the link
16 between smoking and lung cancer.

17 And some of the early tar and nicotine work
18 were done at Roswell Park, the mouse painting
19 experiments. When I came there, basically picked up on
20 the tradition of work in the area of tobacco. Many
21 people call our institution looking for assistance in
22 quitting, and we initiated a stop smoking clinic
23 basically for the public in 1982 and have been running
24 that program.

25 I do that program every month, have clients,

1 I have probably worked with five or six thousand
2 smokers over the years coming to our clinics. We have
3 run nicotine patch clinics. When the nicotine patch
4 came out, we ran a program just for smokers coming to
5 our clinics.

6 So we do all kinds of research on -- related
7 to tobacco, and including surveillance of tobacco, what
8 new products are out. We've been looking at the design
9 of new products such as Eclipse and Accord, and
10 Winstons. There is a claim that Winston has no
11 additives, so we're looking at it.

12 MR. KIRBY: Objection, Your Honor. May we
13 approach?

14 (The following proceedings were had at
15 sidebar:)

16 MR. KIRBY: Well, first of all, none of that
17 was responsive to what was being asked. It was just a
18 speech. But more importantly, he is making a reference
19 now and just did to the so-called -- Winston had a "no
20 additives" or "no bull" campaign, which did not start
21 until August of 1997.

22 THE COURT: Uh-huh.

23 MR. KIRBY: It's --

24 THE COURT: So?

25 MR. KIRBY: It has no relevance to this case.

1 To the extent it would have any marginal relevance, its
2 prejudicial value outweighs its probative value. But
3 it has nothing to do with the case. We have a lawsuit
4 that was filed in May of '94.

5 THE COURT: Uh-huh.

6 MR. KIRBY: People claim they were injured at
7 that time by whatever so-called wrongful conduct the
8 industry had allegedly engaged in, and now we've got
9 somebody talking about a product that came out in 1997,
10 in August. And it just has no relevance to the
11 lawsuit.

12 MR. NEWSOM: And Your Honor, in addition, not
13 only is there nothing about discussing additives in his
14 disclosure, he was asked at his deposition if he was
15 going to discuss additives and he said no.

16 THE COURT: He's just saying: We're looking
17 into it. That's all he's saying. That's what he does.
18 That's what his job encompasses.

19 MR. HEIM: Well, Judge, that may be. This is
20 the problem with these long, narrative responses. He
21 gets asked a short, simple question and gives a long,
22 long response that goes on and on.

23 THE COURT: He asked him what his job is all
24 about. If he didn't, you could accuse him of leading,
25 so.

1 MR. KIRBY: Asked him about the addiction
2 clinic, but --

3 THE COURT: I don't see anything wrong with
4 it. He hasn't related it to anything yet. He just
5 said: This is the nature of my job. If he asked
6 specific questions about what his opinions are, it's a
7 different story. Overruled.

8 (The sidebar conference was concluded, and
9 the following proceedings were held in open court:)

10 BY MR. ROSENBLATT:

11 Q. Dr. Cummings, you were in the middle of your
12 answer basically explaining what you do as the director
13 of the smoking control program, matters you look into
14 and that kind of thing. Please continue.

15 A. Okay. As I mentioned, we look at cigarette
16 designs, a whole range of issues related to tobacco,
17 almost anything; write grants in this area. I have a
18 number of research projects going on. We've done
19 studies on pharmacotherapy for people trying to quit
20 smoking, as clinical trials to evaluate whether any of
21 these therapies work; surveys of who smokes, from kids
22 to adults; and then, of course, we've done recently up
23 in -- as I mentioned, I was doing some work on
24 cigarette design, some of the different products that
25 are out on the market: Eclipse, Accord, Winston.

1 In fact, we've created a surveillance system
2 to look at all the new products, because there's really
3 nobody else out there doing this other than the tobacco
4 companies.

5 Q. In terms of the smoking control program, when
6 you say over the years you've dealt with five or six
7 thousand smokers who were trying to quit, what is your
8 hands-on role -- do you have any hands-on role in terms
9 of recommending to them how they quit and actual
10 therapies they should engage in, and if so, tell us
11 about that.

12 A. Yeah, I mean, I run the clinics. I got
13 started doing this -- I had a student actually that
14 came and worked with me as an intern. That's how I
15 sort of got involved in running the smoking clinics.

16 The student leaves after the semester and
17 people still call up for our clinic. Our clinic is now
18 the largest clinic operating in the western New York
19 area, has been for the last 15 years.

20 And I do the programs. It's become a
21 laboratory. A lot of the research I've done and papers
22 I've written have been based on patients that come to
23 our clinic.

24 I've also been involved in major, large-scale
25 programs done across the country. I was a practical

1 investigator on the so-called COMMIT, Community
2 Intervention Trial for smoking cessation, which was a
3 massive, 42 million dollar effort by the Cancer
4 Institute, to try to intervene in communities to lower
5 the smoking rates by helping people quit smoking;
6 particularly heavy smokers who tend to have a higher
7 risk of developing smoking-related illnesses. We did a
8 lot of things: trained physicians, worked with
9 workplaces, worked directly with smokers. So I have a
10 lot of contact.

11 I also worked quite a bit with prevention.
12 In fact, a lot of my work has focused more recently on
13 the prevention end of things, because it's very
14 discouraging, quite frankly, with many smokers. It's
15 very hard to get them to quit and stay quit, and
16 obviously an ounce of prevention is worth a pound of
17 cure. Getting the kids not to start is critical.

18 So I do a lot of programs myself. I probably
19 do 100 presentations a year to various groups, most of
20 which are to school children, but also health
21 professionals, and of course the smokers who come to
22 our clinic every month.

23 Q. Now, you've got a teaching role at the State
24 University of New York. What relationship is there, if
25 any, between the State University of New York and your

1 chapter there on the history of smoking cessation
2 methods, what had changed over 25 years.

3 And then in 1994, I contributed a section to
4 the Surgeon General's Report that was on smoking and
5 youth, having to do actually with some surveys and
6 public attitudes towards policy measures to restrict
7 youth smoking, things like restricting advertising,
8 sale practices of the industry and so on.

9 Q. And I understand you actually made a
10 contribution in terms of original writing to the '89
11 and '94 Surgeon General's Reports.

12 With respect to the Surgeon General reports,
13 where you served as a reviewer, what was your function
14 there?

15 A. Well, they would send chapters -- I did this
16 for the '88 report on nicotine addiction. I also did a
17 section of the '90 report, and most recently a report
18 on smoking and minorities. And was sent a chapter, or
19 several chapters actually in the case of the last
20 report, which I would go over, review in terms of its
21 scientific merit, offer substantial comments, and send
22 those back to the Office on Smoking and Health.

23 And there were other reviewers who would look
24 at those reports or those chapters as well, and they
25 would compile that, give that back to the author, and

1 institution, the Roswell Park Cancer Institute?

2 A. Well, very close relationship. I'm a
3 professor in the department of social and preventive
4 medicine at the university, and I teach courses in
5 their graduate program. I have graduate students that
6 I've directed over the years.

7 In fact, one of my graduate students is
8 currently the chief of epidemiology for the Office on
9 Smoking and Health, Dr. Gary Giovino. He was a student
10 of mine.

11 And basically, I had very close interaction
12 with the university. Our graduate division is actually
13 a division. The graduate degrees that our students get
14 are really through the State University of New York at
15 Buffalo.

16 I also lecture to a lot of other schools,
17 Niagara University. We have many colleges in the area
18 and I do frequent lectures to students at almost all
19 the universities.

20 Q. What role have you had with respect to any
21 Surgeon General's Reports?

22 A. Well, I've served as a reviewer to a number
23 of the reports, and also a contributor. I contributed
24 to the 1989 Silver Anniversary report. That was the
25 25th anniversary report, the silver cover. I wrote a

1 they would be asked to rewrite it.

2 In fact, being a contributor, I know this
3 process, because it's rather painful when somebody
4 critiques your work and you have to go back and
5 re-write it.

6 But it is a way of making sure you have the
7 most up-to-date science, and the conclusions that are
8 reached are conclusions of not just one individual, but
9 based on the weight of evidence in fact that exists in
10 the scientific community. That's how those reports are
11 prepared.

12 I also prepared a report -- I was asked to
13 serve on a committee -- the Institute of Medicine,
14 National Academy of Sciences put out a report in 1994
15 as well on smoking and youth called: Nicotine
16 Addiction: Growing up Tobacco-Free.

17 And this was a report looking at the whole
18 issue of youth smoking, whether kids get addicted, when
19 they get addicted, the effects of advertising, pricing
20 effects on kids, product regulation.

21 It covered a whole realm of things, because
22 those reports are typically written for Congress as
23 what would be the regulatory or policy implications of
24 some of the findings from the scientific community.
25 And this was done in conjunction because the '94 report

1 came out from the Surgeon General, and the IOM
2 Institute of Medicine report was more the policy piece
3 to that.

4 Q. Dr. Cummings, you know, as I go through your
5 CV, there is a section called Professional and
6 Community Services. There is a listing.

7 You were a member of the committee on
8 preventing nicotine addiction in children and youths,
9 Institute of Medicine, 1993, 1994. What was that all
10 about?

11 A. That was the Institute of Medicine --

12 Q. That you just described?

13 A. -- work. Yes.

14 Q. Now, you've been a reviewer for a publication
15 called: Addictive Behaviors. What kind of publication
16 is that?

17 A. Well, it's a publication on just what it
18 says, addictive behaviors. Authors will send in
19 articles on a whole range of drug-related issues:
20 tobacco, alcohol, heroin, cocaine, a whole range of
21 things.

22 And I've reviewed articles for them. I've
23 published in that journal. The work that I do for them
24 relates to the tobacco work, because that's my
25 expertise.

1 Q. And you've been a reviewer for the Journal of
2 the American Medical Association; is that correct?

3 A. Yes, on numerous occasions.

4 Q. So even though you're not technically an
5 M.D., you're a Ph.D.; you've acted as a reviewer for
6 the Journal of the American Medical Association?

7 A. That's right.

8 Q. Now, what is the relationship between Roswell
9 Park Cancer Institute and the New York State Department
10 of Health?

11 A. Well, we're rather unique as an institution.
12 As I said, we're actually part of the New York State
13 department of health. Roswell Park is a line item in
14 the health department budget. I am a state health
15 department employee, as are all the physicians and
16 Ph.D.s and all the employees of Roswell Park who are --
17 half our employees are actually supported on grants,
18 and half are state employees. I happen to be a state
19 health department employee.

20 So that's the unique relationship, and it's a
21 great investment for New York State, quite frankly.
22 They are investing in cancer research and treatment.
23 We take care of cancer patients.

24 We have devised methods for early detection
25 of cancer, the PSA test, which is widely used now for

1 detection of prostate cancer, was developed at Roswell
2 Park.

3 Similarly, early treatments for childhood
4 leukemia were developed at Roswell Park Cancer
5 Institute, and some of the very earliest studies on
6 smoking and cancer came out of Roswell Park Cancer
7 Institute.

8 In fact, in 1950 an epidemiologist at our
9 institution, a guy by the name of Dr. Morton Levin,
10 published a report in the American Medical Association
11 based on a thousand patients that came into Roswell
12 Park, where he collected smoking histories and
13 demonstrated the fact that the lung cancer patients
14 were much more likely to report a history of smoking
15 than the patients who did not have lung cancer.

16 Q. Can you give us even a rough estimate as to
17 the number of articles which have appeared in the
18 literature on the subject of the relationship between
19 smoking and cancer, smoking and other diseases?

20 A. Well, you get a pretty good idea as you see
21 these Surgeon General's Reports. They get bigger and
22 bigger and bigger, because they, in fact, are just
23 accumulating the evidence that is available on the
24 link. But a rough number -- I would say it's well in
25 excess of 50,000 and probably closer to 100,000

1 articles in the scientific literature on this topic at
2 this point. In fact, the Surgeon General, I think in
3 one of their more recent reports, said it's the most
4 studied cause of disease in history, in medical
5 history.

6 Q. Why do you think that is?

7 A. Because it causes the most problems. A third
8 of our patients at our hospital are there because of
9 smoking.

10 Q. A third of your cancer?

11 A. One-third of our cancer patients. I mean, if
12 I had a vaccine today to prevent a third of cancer,
13 eliminating smoking would be it.

14 And that's why I devote my and have devoted
15 my career to deal with the issue of tobacco and my
16 research on tobacco, and assisting people in getting
17 off this addiction.

18 Q. Now, Dr. Cummings, in your CV there's a
19 section Grants and Contracts. Let me ask you about a
20 few of them.

21 Behavioral Methods to Aid Smokers in
22 Quitting, and there is a Part 1, Part 2 and Part 3.
23 Tell us about that.

24 A. Well, this was a study -- actually, it was a
25 study I did with Dr. Giovino. It was his doctoral

1 dissertation, and we managed to have a lot of money so
2 he could have some money to live on. Graduate students
3 don't need a lot.

4 But this was a study that we actually did
5 with physicians. It was a training program where we
6 trained family physicians to identify and report
7 whether their patients smoke.

8 Amazingly, we had done a little record search
9 of one of our family practice units, and had learned
10 that many of the patients who smoked, there was no
11 evidence in their medical record they were smokers, and
12 there was very little evidence that they were being
13 advised to quit and being offered treatment methods.

14 So Dr. Giovino devised a system to identify
15 the smokers. He interviewed the smokers in the waiting
16 room, and then actually went and did a training program
17 with the medical providers.

18 Half of them got his training and half
19 didn't, and he was basically seeing whether the
20 training made any difference in whether those
21 physicians would go back and do a better job
22 identifying and counseling their patients.

23 It had a slight effect. It was not a huge
24 effect. One of the things that came out of that,
25 though, one of the more interesting findings, and we

1 was alarming to us, because we had done this tracking
2 with different brands.

3 There are over 300 different brands on the
4 market, and yet we found a very strong predilection for
5 menthol cigarettes, and nobody really -- we started
6 looking in the literature: Had anybody ever written
7 anything about this? And there was very little in the
8 literature.

9 That got us interested in some of the
10 advertising and marketing to minorities. I've done
11 some other research on that topic as well. But that
12 was sort of the side light of that particular -- that
13 particular study.

14 Q. Now, then, looking at another grant:
15 Environmental and Policy Determinants of Adult and
16 Adolescent Tobacco Behaviors in 22 North American
17 Communities.

18 What did that involve?

19 A. Well, this is actually a grant we got from
20 the Robert Wood Johnson Foundation to do a secondary
21 data analysis of data that had been collected in this
22 huge National Cancer Institute committee trial that I
23 had mentioned. Federal government spends a lot of
24 money collecting these data, and they often, after the
25 study is done, they don't do much with the data.

1 wrote a couple of papers on this, since this particular
2 family practice clinic was located on the east side of
3 Buffalo -- and the east side of Buffalo is a very low
4 income population and has a high percentage of
5 African-American patients, and he had interviewed these
6 patients, and like most studies, actually in smoking,
7 people never ask the brand. But he asked the brand.

8 MR. HEIM: Your Honor, I'm going to object to
9 this as nonresponsive and hearsay.

10 MR. ROSENBLATT: Explaining a survey, a
11 grant, that he was personally involved in.

12 THE COURT: Yes. I think we're talking in
13 general terms here. Just explain the details of the
14 survey. So overruled as far as it goes.

15 If it gets any more specific than that, then
16 maybe we'll review it.

17 A. (Continuing) Anyway, he collected the data
18 on brand use, and we found -- we had other survey data
19 on brand use from people that called our telephone
20 hotline, most of whom were Caucasian, were not
21 African-American.

22 We found a huge difference in the brands
23 smoked, mainly with menthol brands being the preferred
24 brands among African-American smokers. In particular,
25 three particular brands, Kool, Salem and Newport, which

1 So we went and wrote a grant to get money so
2 we could have time to analyze the results and write up
3 a paper. And we did. We've written up in fact an
4 entire monograph. An entire issue of the journal is
5 devoted to papers that we wrote up that look at the
6 effects of cigarette pricing on tobacco consumption,
7 brand switching among adults.

8 We had unique data. We collected information
9 on smokers in 1988, and then again in 1993. We were
10 able to see how many of those people had quit, how many
11 had died, and how many were still smoking. And we got
12 interested, because of the -- we had data on brands, to
13 say: Well, how many of 8 Marlboro smokers, for
14 example, that we had in 1988, were still smoking
15 Marlboro five years later, or had they switched to
16 Camel or Winston or some other kind of other generic
17 brands out on the market?

18 We found actually there was a very -- very
19 little switching, quite frankly. People were fairly
20 brand loyal. In fact, the amount of switching was less
21 than 10 percent per year on an annual basis.

22 But the switching that was going on was
23 almost all driven by economics. We saw that
24 particularly heavy smokers were and low income smokers
25 were switching to generic or discount brands. And in

1 fact, people who switched were less likely to quit, and
2 seemed like the introduction to discount brands, which
3 really had not been part of the marketing of tobacco
4 products prior to the 1980s, because almost all brands
5 were the same price, there was a price war that went on
6 in the industry, and this really culminated during the
7 time that we were in the field with COMMIT. So we
8 wrote up a paper on that.

9 We had another paper that we did --

10 MR. HEIM: Your Honor, if I may, might we
11 approach on these answers?

12 THE COURT: Yes, I guess so.

13 (The following proceedings were had at
14 sidebar:)

15 MR. HEIM: Your Honor, this is exactly what I
16 meant before when I said these long, narrative answers.
17 I think Your Honor will -- may have noted that during
18 this entire trial, I never object to leading during
19 preliminary matters, because I don't believe you should
20 object to leading during preliminary matters before the
21 witness gets into substantive testimony.

22 But two things are going on here. He just
23 started to talk about yet another study that he's
24 doing, that was not responsive to this, and the second
25 is that the rule that Your Honor has generally adopted

1 while counsel has been going through the CVs of these
2 witnesses, that while he can say: Well, yeah, the
3 focus of this particular paper or the focus of this
4 particular study on my CV was X, he could not go into
5 the contents of it because it's hearsay. We've all
6 kind of gotten along with that approach that Your Honor
7 has taken.

8 What this witness is doing is he's putting
9 the whole thing in. He's putting everything that's in
10 his article or what his study is in by describing it in
11 great detail. It is hearsay. It is a narrative
12 response that goes way beyond the question, and there's
13 no way that -- to stop it, once he gets rolling. So
14 that's the basis of my objection.

15 MR. NEWSOM: He's offering all sorts of
16 opinions from these articles he hasn't been qualified
17 to give. They're not within his disclosure.

18 MR. ROSENBLATT: They are his articles, his
19 research. His expertise, unlike a lot of the other --
20 some of the other experts is totally broad. It's all
21 encompassing. He's talked about cancer and health,
22 health behavior. That's what he got his Ph.D. in,
23 health, cancer. He's at an institution that all they
24 do is treat cancer and deal with cancer, and for 18
25 years he's run a smoking cessation clinic. He's just

1 got broad expertise. It's difficult and artificial to
2 try to cut him off.

3 THE COURT: Doesn't make any sense to me to
4 say here is an expert who did research into a field,
5 wrote a paper, and to limit him to only what the thrust
6 of it -- I did a study on the pricing of various
7 brands, and to drop it at that and say that's it; you
8 can never testify about anything broader than that,
9 because anything broader than that would be hearsay.
10 How do you ever get into evidence, anything at all, by
11 limiting it in that regard? And only hoping that maybe
12 the defense will ask him a question about it so that he
13 can then talk about it? That doesn't make any sense.

14 MR. HEIM: Well, Your Honor, we've had this
15 discussion many times.

16 THE COURT: I know. Maybe one of these days
17 they will come to see the light along the line; that in
18 order to get evidence, in order to get testimony to
19 find out what we're talking about, somebody has got to
20 talk about what they're doing, and this is what he, in
21 my opinion, is doing. He did the research, wrote the
22 papers. This is the findings.

23 I don't consider that to be a hearsay
24 objection to the point where he can't talk about it.

25 Now, expressing an opinion which may be

1 detrimental to somebody else, well, we'll reach that
2 point when we get there. But right now I think this is
3 just preliminary stuff.

4 MR. HEIM: Well, Your Honor, my belief is
5 that he can -- consistent with what Your Honor has said
6 before, he can say what the study is about, and he can
7 say, does he have an opinion about it; he can have an
8 opinion about it.

9 But to put through in one fell swoop
10 everything in the study and his opinion without there
11 being any foundation for it, is putting the article in,
12 which he is not entitled to do under Florida rules, and
13 goes well beyond what we've been doing with every one
14 of these witnesses.

15 And then as far as what I said before, what
16 he's starting to do now, when I stood up and
17 interrupted, he started to go into yet another report.

18 MR. ROSENBLATT: I disagree that this is
19 different than what we've done. The format -- we get
20 to it later on.

21 MR. HEIM: I think you just went by it,
22 Judge.

23 THE COURT: No. It's right here.

24 MR. HEIM: We had another paper that we did.

25 THE COURT: He didn't get to the other paper

1 yet.

2 MR. HEIM: That's when I interrupted him.

3 THE COURT: Before he gets to the other
4 paper, we'll find out what he's talking about, what
5 other research did he do or whatever. I just don't
6 find it to the point where we're getting beyond the
7 rules. I just don't see that. We're talking about
8 what the man did, and what his expertise is, and what
9 it is that he does, and what his findings were, his
10 findings.

11 Anybody's findings in science has got to be
12 related to something that somebody else does. So it
13 doesn't make sense to shut our eyes to it and close our
14 minds to it and say: We can't talk about it, because
15 we have to bring back everybody who injected the
16 miscellaneous with something: Did you inject the
17 miscellaneous? Yes. What happened then? Somebody
18 else looked at the slides. So bring the slide person.
19 That doesn't make any sense.

20 What you do is compile evidence. It's a
21 summary, a composite, and somebody looks it over and
22 makes a decision based upon the results. That's what
23 he's doing.

24 And to limit it to say that you can't have
25 him testify as to what he did, what his findings are,

1 uniform. It was -- there were some differences by age,
2 and every community that we looked at, in fact, when
3 you looked at people over the age of 50, basically
4 there was a decline in smoking.

5 So people were quitting smoking. But there
6 was not true -- in fact, it was pretty much a wash when
7 you looked at the 18 to 24 age group. Half of the
8 community saw an increase and half saw a decrease. So
9 the decline in smoking was very much related to age.

10 So we got curious. Well, what were the
11 predictors of quitting? After all, if you had done
12 this massive study on people trying to quit smoking --
13 in fact, the largest study ever done in the public
14 health community was quitting smoking, this particular
15 project.

16 So we published some papers and one of the
17 topics was Predictors of Smoking. Among a cohort of
18 adult smokers followed over five years, we found over
19 that five-year period, when we asked the people in
20 1988, all smokers, whether they wanted to quit, 70
21 percent said they had a desire to quit smoking.

22 When we went back five years later, only a
23 small fraction of those people had actually been
24 successful in quitting, although a large number had
25 tried.

1 just defies intelligence. I'm going to let him talk
2 about this as related to his findings, his research,
3 what he did, what he found.

4 (The sidebar conference was concluded, and
5 the following proceedings were held in open court:)
6 BY MR. ROSENBLATT:

7 Q. Do you remember where you were? I think you
8 were discussing your findings and research in
9 connection with the general topic of --

10 A. One of my grants, I believe.

11 Q. Correct.

12 A. And I was going through the litany of papers
13 that we had published in the Journal of Tobacco --

14 Q. Had you finished?

15 A. There were six papers. Some of them dealt
16 with the trends in smoking.

17 One of the more interesting things we found
18 is the trends in smoking between 1988 and 1993 were
19 declining among adults, but increasing among children.
20 We had surveyed ninth graders in 1990, in these 22
21 communities, and we also -- we surveyed another group
22 of ninth graders in the public schools in these
23 communities in 1992, and we found that smoking rates
24 were going up among ninth graders.

25 Among adults, the decline in smoking was not

1 In fact, a significant number of people had
2 reported trying to make a quit attempt. And we were
3 very careful about defining a quit attempt. You had to
4 quit for at least 24 hours, be off of the cigarettes.

5 The reasons for quitting. We asked the
6 people who were successful: Why did you quit? And
7 then the people who tried to quit: Well, why did you
8 try to quit? And the overwhelming, number one reason
9 that people were trying to quit and get off cigarettes
10 was health concerns, which probably explains why we
11 found the higher quit rates among the older people, age
12 40 and older. There were many more successful quitting
13 attempts, and it's probably related to some of the
14 health problems you tend to see in people who are over
15 the age of 40.

16 And also people in our survey data asked
17 these questions about the health problems that smokers
18 had experienced and the experience of health symptoms,
19 coughing, wheezing, things of that nature, were
20 correlated with more serious efforts at quitting.

21 Q. You know, Dr. Cummings, it occurs to me the
22 jury has heard a lot of witnesses talk about, you know,
23 grants, where a scientist at an academic institution or
24 a cancer research institute gets money to conduct
25 research.

1 A. Right.
 2 Q. And the writing up of grants, just give us a
 3 thumbnail sketch of how that works, how a scientist who
 4 has an idea in mind and would like to get funding,
 5 money, goes about doing it.
 6 A. Well, it's not easy to get the grants, but
 7 it's like in business, it's like writing a business
 8 proposal to somebody to do some work. You have to put
 9 down what you're going to do and you have to compete to
 10 win the award.
 11 The National Cancer Institute and other
 12 groups like the Robert Wood Johnson Foundation have
 13 money that they will give to investigators, but there
 14 is a competition for the money. And you have to be
 15 very qualified. In fact, it helps to have a little bit
 16 of a track record of research that you do, to build on
 17 the work that's sort of done in the field. You just
 18 don't want to repeat stuff that's been done; you want
 19 to sort of break new ground.
 20 I've been very successful in getting grants
 21 over my career. The people at Roswell Park, quite
 22 frankly, if you're going to be a scientist at Roswell
 23 Park, you have to be successful in bringing in grants.
 24 That's one of the criteria for being there. We are a
 25 very successful institution. Half our employees at

1 Roswell Park Institute are there because of the money
 2 that we generate through research grants.
 3 But it's a very time-consuming process. To
 4 put together a project, a grant application may take
 5 three or four months of really focused work and writing
 6 a review of the literature, and then you don't
 7 always -- are not always successful the first time.
 8 You get comments back and sometimes you have to go
 9 through the process all over again.
 10 Q. For example, as I look at the grant section,
 11 you received what seems like a great deal of money,
 12 \$330,000, to investigate defective cigarette filter
 13 policy implications.
 14 First of all, who did you get that money
 15 from?
 16 A. From the National Institutes of Health.
 17 Actually, the National Cancer Institute. And this was
 18 a project looking at -- actually, building on an
 19 observation that a colleague of mine at Roswell Park,
 20 Dr. John Pauly, had made, that filters --
 21 MR. NEWSOM: Your Honor, objection. May we
 22 approach, please?
 23 THE COURT: Okay.
 24 (The following proceedings were had at
 25 sidebar:)

1 MR. NEWSOM: The study he's about to testify
 2 about relates to a claim that some of the cellulose
 3 acetate in the filters comes off during the smoking
 4 process. There is no claim in this case, there's never
 5 been a claim in this case, there's never been any
 6 mention in this case, has anything related to this
 7 case. And besides, he has no evidence that anybody's
 8 ever been harmed by it. It's irrelevant, prejudicial.
 9 It's irrelevant. Has nothing to do with the case.
 10 MR. ROSENBLATT: We've got a witness on the
 11 stand. We've got \$330,000 in grants to investigate
 12 filters. This goes to behavior and conduct on the part
 13 of the tobacco companies.
 14 There are three big issues in this case:
 15 causation, addiction and behavior. This relates to the
 16 behavior.
 17 Something they knew, just continuing pattern
 18 of deception, that they -- they knew these filters were
 19 defective and never told anyone about it. I'm not
 20 going to ask about warnings or anything like that, but:
 21 What did your research show?
 22 MR. NEWSOM: It has nothing to do with any
 23 claim in this case. It's not within his disclosure.
 24 THE COURT: Overruled.
 25 MR. HEIM: Your Honor, while we're here, I

1 gather -- I don't like interrupting, so I gather I have
 2 a standing objection to this witness testifying in
 3 depth about these articles on the grounds of hearsay,
 4 because my feeling is -- I know Your Honor's feelings
 5 about it, but my belief is that the rules are there for
 6 a particular purpose, and the purpose is that a lot of
 7 these underlying things are not easily
 8 cross-examinable because they're hearsay, and hearsay
 9 within hearsay; and to use them as the basis for
 10 opinions is not proper.
 11 THE COURT: I still believe that a scientist
 12 can talk about his findings based on work that he's
 13 done in concert with other folks, and if there's a
 14 compilation of all this information that turns out to
 15 be a report which he authors or is responsible for, I
 16 think that's fair game. That's not hearsay.
 17 If he's relating to somebody else's report,
 18 upon which he wants to base his opinions on, that's a
 19 different story. That falls maybe within hearsay.
 20 But his own work in conjunction with other
 21 people in his own department, I don't have a problem
 22 with that.
 23 MR. HEIM: I think you've got both things
 24 mixed up in here. I want to make sure I have a
 25 standing objection so I'm not popping up and

1 interrupting the witness. Or if you would rather I
2 not, I'll just pick and choose my spots.
3 THE COURT: Standing objections lead people
4 down the wrong path at times.

5 MR. HEIM: Why don't I not, and I'll try to
6 be circumspect.

7 THE COURT: Let's face it. If he's talking
8 about what he does as a living, it's like what you as a
9 lawyer do, and a lot of things are done by -- like
10 research done by people on your staff. We can't help
11 but talk about a deposition: Joe Blow from my office
12 did the deposition, and this is what he found. Come
13 on.

14 (The sidebar conference was concluded, and
15 the following proceedings were held in open court:)

16 BY MR. ROSENBLATT:

17 Q. Dr. Cummings, you were talking about your
18 research on the cigarette filters?

19 A. Right. I'm an investigator on an NIH grant
20 that is investigating a defect in cigarette filters.
21 And this was research that I did in collaboration with
22 Dr. John Pauly, who is a molecular immunologist at
23 Roswell Park, who some six years ago came to me with
24 some slides that he had. Now he does work looking at
25 lung tissue.

1 He was actually doing research on looking at
2 chemotherapy, agents that they could deliver to lung
3 tissue for treatment, and he made an observation that
4 he wanted to check out with me. He said: Did you ever
5 hear of anybody inhaling a cigarette filter fiber?

6 THE COURT: I don't want to get into anything
7 he was talking about. Just get into your research and
8 what you found.

9 A. (Continuing) I said: I never heard of that,
10 but I would review the literature.

11 I reviewed the literature and could not find
12 anything within the literature about cigarette filter
13 fibers being inhaled.

14 We pursued this and developed some research
15 related to the fact that cigarette filters, in fact,
16 are defective. The fibers literally dangle off the end
17 of a cigarette. In fact, I brought some slides along
18 today --

19 THE COURT: We'll get into that later.

20 A. -- that could show, if you look under a
21 high-powered microscope at a regular cigarette filter,
22 a cigarette filter is made out of cellulose acetate
23 which is basically a type of plastic. In fact, it's
24 very much like film.

25 We began looking at the patents for cigarette

1 filters that existed back in the '50s, when they
2 started the creation of cigarette filters. In fact,
3 one of the earlier patents was by Kodak, because they
4 make film. Eastman Tennessee has been a long-time
5 producer of cigarette filters.

6 Film is translucent, by the way, clear; you
7 can see through film. Cigarette filters, the cigarette
8 filters on a pack of cigarettes, are white. They are
9 painted with titanium dioxide, sort of like white shoe
10 polish. It's a pigment with a milky white appearance.

11 But the original patent actually from Kodak
12 talked about the fact that you would never want to
13 block all the tar in a cigarette -- that was one of the
14 reasons that they created the filter, was to try to
15 filter out some of the tar -- because the tar is
16 largely a taste component in a cigarette. That's why
17 you get a lot of the taste from a cigarette.

18 So the fibers that are bundled together in a
19 cigarette filter are literally microscopic to the eye.
20 There are about 18,000 individual fibers bundled
21 together, and they're not tight together. And, in
22 fact, throughout the cutting, the way they make
23 cigarettes on a high-speed cigarette-making machine,
24 they cut the filter, and it creates a -- it cuts the
25 filter and creates fragments.

1 And the fragments, in fact, are loose and the
2 fibers themselves are loose. So we undertook these
3 experiments to see whether they come off; whether this
4 thing that we observed in the lung of a smoker was, in
5 fact, a cigarette filter fiber.

6 And you can do very simple tests: Tongue
7 test, if you touch a cigarette filter to your tongue
8 and put a piece of scotch tape to your tongue and take
9 the tape off and put it down on a microscope slide, you
10 will find that the fibers have come off that easily.

11 Then we undertook a study, and Dr. Pauly has
12 done these studies on autopsies of patients, where we
13 harvested the filter fibers out of the lungs of
14 cigarette smokers. And we only find them in smokers of
15 filtered cigarettes, not in nonfiltered cigarettes, not
16 in nonsmokers.

17 We've done sophisticated, basically forensic
18 pathology techniques to demonstrate these, in fact, are
19 cigarette filter fibers and not other kinds of fibers
20 like from your clothes or in the air or whatever. And
21 we published a number of studies on this topic.

22 We wrote a grant to the National Cancer
23 Institute to document this, and we've been working on
24 this grant for the last two and a half years.

25 And have looked at other defects: charcoal in

1 a Lark cigarette, which there is a little charcoal
2 cavity, and the charcoal in fact migrates. We've
3 demonstrated that the charcoal granules in a Lark
4 cigarette actually come off.

5 We've done studies to look at what smokers,
6 when they inhale the cigarettes, how many of the fibers
7 come off. This is not an easy thing to do, but we've
8 been able to do and demonstrate that the fibers come
9 off easily.

10 Q. You're talking about your own research?

11 A. Yes, of course. And then I've gone ahead and
12 done some research to find out whether smokers are
13 aware of this, and most smokers are not aware of the
14 effect.

15 MR. KIRBY: Objection, Your Honor.

16 Preemption.

17 THE COURT: Not yet. Overruled.

18 A. (Continuing) Most smokers are not aware of
19 this problem.

20 We did a study with people at the Department
21 of Motor Vehicles. We went up, and there was an easy
22 place to do interviewing with people, and identified
23 smokers and ex-smokers and asked them whether they had
24 ever heard of the fact that cigarette fibers come off
25 the end of a cigarette.

1 to index and abstract these documents, and we're going
2 to be in the process of writing up a number of articles
3 based on what we've learned.

4 Q. What have you learned?

5 MR. NEWSOM: Objection, Your Honor.

6 MR. KIRBY: Objection, Your Honor.

7 MR. HEIM: Objection.

8 THE COURT: Come over here.

9 (The following proceedings were had at
10 sidebar:)

11 THE COURT: All right. What's the problem?

12 MR. HEIM: He's now going to testify based on
13 quote, "tens of thousands of unspecified industry
14 documents" -- that we don't know anything about, we
15 don't know whether they're objectionable or not --
16 about a study --

17 THE COURT: Go on, I'm listening.

18 MR. HEIM: -- about a study that was based on
19 his testimony, still currently in progress and that we
20 have never seen.

21 We have no basis to cross-examine him on it,
22 and this is exactly why the rule is what it is. This
23 is putting in a semiconclusion that is very
24 prejudicial, because you know what he's going to say,
25 by using hearsay, probably hearsay within hearsay, and

1 MR. KIRBY: Objection. Preemption and
2 hearsay.

3 THE COURT: Well, I want to get further.
4 Overrule just now.

5 MR. ROSENBLATT: All right. Let me go to
6 another subject.

7 THE WITNESS: Sure.

8 BY MR. ROSENBLATT:

9 Q. Have you ever received any grant on the
10 subject of youth marketing?

11 A. Yes, I have.

12 Q. Tell us about that.

13 A. I have a grant currently from the National
14 Cancer Institute looking at marketing to youth,
15 evidence from corporate documents. And because of the
16 wide availability of documents from the litigation
17 that's been going on against the industry, we've
18 collected a number of these documents and are doing a
19 systematic analysis to look at what they say with
20 regard to the marketing to youth, and also to
21 minorities. We've just gotten a supplement to that
22 grant to extend that to look at minorities.

23 I have a whole library of documents. I'm
24 talking now tens of thousands of documents that we've
25 collected. I have seven librarians working full-time

1 a source that is still not even in the literature yet.
2 And that's the objection to it.

3 It is totally improper and it's highly
4 prejudicial for this witness to do this. It's never
5 been disclosed that he's going to testify on some study
6 that he's worked on about youth marketing. That's
7 total surprise.

8 MR. NEWSOM: Based on documents that are not
9 in evidence that may be objectionable, that may be
10 privileged. We have no way to test that if he just
11 blurts out what his opinion is.

12 MR. ROSENBLATT: I think an expert witness
13 has a right to rely on documents. An expert witness
14 can say: I've reviewed documents the last 10 or 15
15 years. He's got several librarians working on this.
16 I'm not going to ask him to point at a particular
17 document. He's got a grant.

18 THE COURT: Do you know what he's going to
19 say?

20 MR. ROSENBLATT: He's going to say they
21 target youth. I don't think he's going to say document
22 X says such and such. It's not going to be that kind
23 of testimony.

24 That's a very fair conclusion to reach from a
25 review of thousands of documents: They target youth.

1 Because they say they don't.
 2 THE COURT: That's his opinion.
 3 MR. ROSENBLATT: Yeah.
 4 MR. NEWSOM: We were provided with a list of
 5 the documents that he's going to rely on, which is
 6 about 20 or 25 documents, none of which yet have been
 7 admitted in evidence. Many of them are objectionable.
 8 THE COURT: May be not admissible?
 9 MR. NEWSOM: May be not admissible.
 10 MR. HEIM: This is a total surprise. He's
 11 running through his CV, and he comes across something,
 12 asks him a question, and suddenly this witness is an
 13 expert on everything.
 14 And he says: Well, we're working on a study
 15 and I've got tens of thousands of documents. And on
 16 the basis of that, they target that.
 17 That is surprise testimony. It's not --
 18 THE COURT: Well, isn't it cigarette
 19 behavior? And what he's alleged to be an expert in,
 20 social and behavioral aspects of smoking.
 21 MR. ROSENBLATT: Absolutely. And in his CV,
 22 it's clear from his CV he's gotten grants, done
 23 articles, he's made presentations. This is --
 24 MR. SCHNEIDER: Your Honor, there's an effort
 25 to try to convert him into a conduct witness. He's

1 basically saying: I've reviewed thousands of
 2 unidentified documents, and I'm here to give you my
 3 opinion on what I think the tobacco companies' conduct
 4 is, what I think the tobacco --
 5 THE COURT: That's what experts do, don't
 6 they?
 7 MR. SCHNEIDER: Experts can give you issues
 8 of science, they can give you opinions on whether lung
 9 cancer is caused by a particular thing. But they can't
 10 come out and say: In my opinion tobacco companies did
 11 X.
 12 That's a conduct witness, a fraud witness;
 13 that's not an appropriate topic of expertise.
 14 THE COURT: Now you are talking about very
 15 esoteric issues as to what he believes is something
 16 regarding behavior. We're not talking about pure
 17 science in a sense of cellulose structures and things
 18 of that nature; you're talking about behavioral
 19 sciences.
 20 In order to determine behavioral sciences,
 21 you study behavior of people, industry, whatever, and
 22 you reach conclusions based on whatever you have
 23 determined.
 24 MR. ROSENBLATT: He's got a Ph.D. in health
 25 behavior.

1 MR. SCHNEIDER: He's not testifying about
 2 health behavior of smokers; he's trying to testify
 3 about industry conduct.
 4 THE COURT: It's all connected. Overruled.
 5 MR. HEIM: There's privilege issues here.
 6 THE COURT: We haven't gotten into any
 7 documents yet.
 8 MR. HEIM: That's the problem, Judge.
 9 (The sidebar conference was concluded, and
 10 the following proceedings were held in open court.)
 11 BY MR. ROSENBLATT:
 12 Q. I think I had just asked you what were your
 13 findings, in terms of your research on youth marketing
 14 after having reviewed thousands of tobacco company
 15 documents.
 16 A. The findings are consistent with what my
 17 other research had suggested that I've done and
 18 published papers on, which is the tobacco companies
 19 have long had an interest in marketing to youth. It's
 20 expressed in their documents; that their claims that
 21 they are not interested in marketing to youth is a
 22 blatant lie.
 23 MR. KIRBY: Objection, Your Honor.
 24 MR. HEIM: Move to strike the testimony.
 25 THE COURT: Sustained as to the word. The

1 jury will disregard.
 2 MR. ROSENBLATT: Okay. Let me --
 3 BY MR. ROSENBLATT:
 4 Q. In terms of the public position that the
 5 tobacco industry has taken over the years, that they
 6 spend millions upon millions of dollars to in effect
 7 attract switchers --
 8 MR. KIRBY: Objection, leading.
 9 THE COURT: Hasn't gotten there yet.
 10 MR. KIRBY: Counsel is testifying.
 11 MR. ROSENBLATT: And counsel is interrupted
 12 for a change.
 13 THE COURT: Overruled.
 14 Just continue with the question and I'll let
 15 you know if it's leading.
 16 BY MR. ROSENBLATT:
 17 Q. In terms of the tobacco industry's public
 18 position over the years that they do not market to
 19 youth, and that they spend millions of dollars in
 20 advertising every year simply to get switchers to
 21 convince the Marlboro switcher to switch to Camel, to
 22 convince the Camel switcher to switch to Marlboro, has
 23 your -- what has your research shown with respect to
 24 the veracity of that claim by the tobacco industry?
 25 MR. KIRBY: Objection.

1 MR. SCHNEIDER: Objection.

2 THE COURT: Overruled.

3 A. My research has shown that that claim is
4 false. And in fact, my research, as I already
5 indicated when we looked at brand switching, in our
6 study from the COMMIT trial, the amount of brand
7 switching that we found was very low, less than 10
8 percent.

9 In fact, if you base that on company
10 switching -- because a company really doesn't get much
11 benefit when somebody switches from one of their brands
12 to another one of their own company's brands, and there
13 the percentage of switching is even lower.

14 And in fact, this is articulated in the
15 documents from the industry themselves. They recognize
16 that consumers are very brand loyal, and they also
17 recognize the biggest threat to loss of customers --
18 which is what we saw, again, in our COMMIT study -- was
19 people quitting smoking.

20 And, in fact, that they do a lot to try to
21 keep people smoking, because people do quit. And we do
22 see people quitting smoking every year in this country.
23 They have to replace them. And they talk blatantly
24 about replacing them with new recruits, new smokers.

25 And some of the documents, a Lorillard

1 talking in general terms, without making reference to
2 any specific -- go ahead.

3 A. (Continuing) Documents that I have seen show
4 a direct interest in marketing to youth because they
5 have to replace the smokers who quit and die every
6 year, and, in fact, talk about the fact that the
7 success of their companies and brands will depend on
8 their ability to recruit new smokers.

9 And, in fact, this is evident when you look
10 at the market shares of different companies and how
11 companies have grown or gotten smaller over the years.
12 Their ability to recruit new smokers to their brands
13 has been indicative of their success.

14 Q. Dr. Cummings, have you made a study of the
15 brands that are most popular with young people?

16 A. Yes.

17 Q. Young people being defined as under the age
18 of 18.

19 A. Yes. Our study in COMMIT, ninth graders,
20 these are 14 and 15-year-olds, and I think we were one
21 of the first to publish this observation here in the
22 United States.

23 Of the 300 or some odd brands available in
24 the market, we found teenagers in our COMMIT study
25 smoked three brands: Marlboro overwhelmingly, Camel

1 document in 1978 --

2 MR. NEWSOM: Objection, Your Honor.

3 MR. ROSS: Objection, Your Honor. He's
4 testifying to the contents of documents that are not in
5 evidence, haven't been disclosed, haven't even been
6 identified.

7 THE COURT: Sustain the objection.

8 THE WITNESS: Okay.

9 BY MR. ROSENBLATT:

10 Q. Without making reference to a particular
11 document.

12 A. Well, many of the documents that I've read,
13 from all the companies, talk about a very direct
14 interest in recruiting --

15 MR. KIRBY: Objection, Your Honor. It's the
16 same thing.

17 MR. HEIM: Objection, Your Honor. Making
18 reference to all the companies.

19 MR. ROSENBLATT: No, it's not.

20 MR. KIRBY: He's testifying as to the
21 contents of documents not in evidence --

22 MR. ROSENBLATT: Are we making speeches now?

23 THE COURT: Yes, we are.

24 MR. KIRBY: -- not disclosed to us.

25 THE COURT: Overrule the objection. He is

1 and Newport.

2 And there was quite a lot of variation.

3 Actually, on the east coast, Newport was a lot more
4 popular. Newport was almost the exclusive brand that
5 we see being smoked by teenage -- African-American
6 teenagers.

7 In particular, it's a very popular brand in
8 urban eastern coast states, and not as popular out west
9 for some reason. This has been repeated by a number of
10 other investigators, including myself. We've also done
11 some follow-up studies to this.

12 In fact, in our study in COMMIT, 1988, we did
13 a survey of brand use among the adults; and in 1990, we
14 did a study of the teenagers in those same communities
15 to see if it was a spillover, whether there were a lot
16 of Marlboro smokers in one community and therefore the
17 kids were smoking Marlboro, and looked at that
18 switching over time. When we went back a few years
19 later to resurvey both the kids and the adults, we
20 found there was this shift to generic cigarettes among
21 the adults.

22 Q. Generic being the discount?

23 A. Yes. These are cigarettes that have no label
24 on them or what they call discount brands. There are a
25 variety of discount brands that are sold. There was a

1 fair amount of those brands, and huge growth. In fact,
2 that went from about 6 percent of brand use among the
3 adults in 1988 to over 30 percent in 1994. It was a
4 huge change.

5 Among the kids, however, there was very
6 little switching to generics. In fact, they stayed
7 with Marlboro, Camel and Newport. Between 1990 and
8 1992, in those communities, the brand that grew the
9 most was Newport. And that was very much tied to a
10 trend that we had seen earlier, which was a decline in
11 smoking among African-American youths that was
12 occurring in the -- during the decade of the 1980s, and
13 an increase, particularly sharp increase in
14 African-American teens smoking. And Newport is their
15 brand of choice.

16 Q. Which brands of cigarettes are advertised
17 most heavily in this country?

18 A. Well, it so happens that Marlboro is the most
19 heavily-advertised brand, and Camel and Newport are
20 among the most heavily advertised brands as well.

21 Q. Do you think -- is that a coincidence, in
22 your opinion, or is there a relationship between the
23 heavy advertising and the fact that those are the three
24 most popular brands among youth?

25 A. I've stated previously in my writings that I

1 don't think it's a coincidence. In fact, it's
2 indicated in the documents that I've read that the
3 tobacco industry, in fact, argues about spending --

4 MR. KIRBY: Objection, Your Honor.

5 MR. ROSS: Objection.

6 A. -- spending more money to get that.

7 Q. Now, Dr. Cummings, you have a Ph.D.?

8 THE COURT: Wait a minute. Overrule the
9 objection, just for the record. Go ahead.

10 BY MR. ROSENBLATT:

11 Q. Now, you have a Ph.D. in health behavior.
12 You've studied -- have you studied adolescent behavior
13 and youth behavior as it relates to this whole issue of
14 smoking and health?

15 A. Yes, I have.

16 Q. Do most youngsters -- you know, it seems that
17 most kids are very well-informed today and should know
18 that cigarettes are potentially dangerous.

19 A. Yes.

20 Q. Most of them know that?

21 A. I would agree with that.

22 Q. Okay. Now, what would -- what would, in your
23 opinion, be the impact if a well-qualified medical
24 doctor addressed a high school full of students, told
25 them about the dangers of smoking, it can cause all

1 these diseases, and recommended to them in the
2 strongest terms possible that it is in their interest
3 never to take up smoking, and if they are smoking now,
4 to quit smoking, what impact would that have on the
5 kids, listening to such an M.D.?

6 MR. NEWSOM: Objection. Speculation, Your
7 Honor.

8 THE COURT: Sustained.

9 A. Well, my experience is --

10 THE COURT: No. I sustained the objection.
11 It's speculative as to what would have occurred.

12 BY MR. ROSENBLATT:

13 Q. What, in your opinion, would be the practical
14 impact of such a talk on those students?

15 MR. NEWSOM: Same objection, Your Honor.

16 THE COURT: Same ruling.

17 BY MR. ROSENBLATT:

18 Q. Have you, in fact, done research on that type
19 of thing, as to what influences --

20 A. I've had the experience of being that person,
21 giving those talks, and my experience is it has very
22 little impact.

23 MR. NEWSOM: Your Honor, he is not a
24 well-qualified medical doctor.

25 THE COURT: Well, that's true. I will

1 sustain that.

2 BY MR. ROSENBLATT:

3 Q. What is the reason that well-informed kids,
4 based on your research, your experience, your 18 years
5 at the Roswell Park Cancer Institute, continue to smoke
6 in spite of all the warnings, all they see, and their
7 knowledge that smoking is bad for them?

8 A. Well --

9 MR. NEWSOM: Objection.

10 MR. KIRBY: Objection, Your Honor.

11 THE COURT: Based on his research.

12 Overruled.

13 A. Well, this was discussed at length in the
14 Institute of Medicine report that we prepared on
15 teenage smoking, because I think this is the crux of
16 the issue. With all the information that kids have
17 available today, you know, why do we see kids, any
18 kids, smoking?

19 And the argument that we made in that report,
20 which I happen to believe, is that quite -- kids
21 basically don't believe that they're going to get
22 addicted. They think they can do this for a very short
23 period of time and will quit.

24 In fact, surveys that have been done, that we
25 cited in the Institute of Medicine report where we

1 asked kids about their smoking behavior, they said: Do
2 you think you'll be smoking --

3 MR. NEWSOM: Hearsay, Your Honor.

4 A. (Continuing) It's not --

5 THE COURT: Overruled.

6 A. (Continuing) Do you think you'll be smoking
7 five years from now? Of the smokers, if you took 100
8 high school smokers, what you find is 85 percent of
9 those kids state that they think that they'll be not
10 smoking five years down the line.

11 And they've gone back and asked those kids
12 whether they're smoking, a panel study that was done by
13 the University of Michigan, and only 25 out of 100 have
14 quit smoking. 75 out of 100 are still smoking.

15 The vast majority of teenagers today, in my
16 opinion, understand the health risks of smoking.
17 They're doing it because it's the thing to do; they're
18 out at the party, they're doing it for the moment;
19 they're not thinking about the long-term consequences
20 or the potential of quitting.

21 They believe they can quit anytime they want,
22 and unfortunately, many of those teens learn -- because
23 in the same survey that the University of Michigan had
24 done, over 50 percent of those teenagers had tried to
25 quit.

1 MR. NEWSOM: Your Honor, that's somebody
2 else's survey now.

3 THE COURT: Sustained.

4 BY MR. ROSENBLATT:

5 Q. Just talk about yours.

6 A. I was quoting out of the University of
7 Michigan --

8 THE COURT: I will sustain it anyway. Not
9 your work; somebody else's work.

10 THE WITNESS: Well, I was an author on the
11 report. But I don't want to argue about it.

12 My experience is that many kids think they
13 can quit, and they find soon after they get into
14 smoking for a while, a few years, that they struggle
15 mightily to get off of cigarettes. And not everybody
16 does.

17 And there's some unanswered questions as to
18 which kids are ending up smokers and which ones don't.
19 Perhaps genetic predisposition is one of the things
20 they're looking at.

21 I've done research and I'm involved in some
22 research looking at genes, looking for nicotine
23 addiction.

24 BY MR. ROSENBLATT:

25 Q. Now, Dr. Cummings, looking at an article in

1 your curriculum vitae: Debunking Myths About
2 Self-Quitting: Evidence from Ten Perspective Studies
3 of Persons Quitting Smoking by Themselves, which was
4 published in the American Psychologist, what was the
5 thrust of that article?

6 A. Well, this was looking at the idea of people
7 just quitting on their own and not having any
8 difficulty in stopping smoking, it's easy to quit
9 smoking, you can quit anytime you want, and this shows
10 that most smokers are struggling mightily to quit.

11 These were the compilation of data that were
12 collected from six or seven studies that were done
13 around the country. We were one of the participants,
14 which is why I was an author on that particular paper.
15 It was looking at the self-quitting process.

16 And many smokers try and fail and try again
17 and try again and try again before they are ultimately
18 successful in quitting. And some people may never
19 ultimately be successful, as unfortunately we see every
20 day at Roswell Park Cancer Institute with our patients.

21 Q. In terms of your own hands-on experience with
22 five or six thousand smokers who are trying to quit
23 smoking over the years, what conclusions have you
24 reached on the subject of quitting?

25 A. Well, my experience, and again the study that

1 we did with COMMIT where we followed 13,000 smokers,
2 the best predictor of quitting was how much you smoked
3 and how addicted you were.

4 The measure of addiction is smoking first
5 thing in the morning, you have -- you've gone all night
6 without having a cigarette, your nicotine levels are
7 depleted, and smoking first thing in the morning. A
8 measure that you use is typically: Do you smoke within
9 30 minutes of getting up in the morning?

10 And the people that answered yes to that
11 question were much less likely to quit. The people who
12 smoked more cigarettes were much more likely to quit
13 smoking over that five-year period despite the fact
14 that the vast majority -- and when you control out who
15 said: I really want to quit smoking, I'm going to try
16 to quit smoking, the ones who were the heavier smokers
17 were the least successful.

18 So without nicotine in the product, I don't
19 think you would see people smoking.

20 Q. Now, Dr. Cummings, I want to ask you about an
21 article you did, the title of which is: What
22 Scientists Funded by the Tobacco Industry Believe About
23 the Hazards of Cigarette Smoking.

24 A. This was a survey that we did in 1989.

25 MR. MOODIE: Objection, Your Honor.

1 MR. HEIM: I'll object on hearsay grounds to
2 this.
3 THE COURT: All right. We have to talk about
4 this one, I guess.
5 (The following proceedings were had at
6 sidebar:)
7 THE COURT: What is the objection?
8 MR. MOODHE: Your Honor, if I may, this
9 article purports to be a survey that Dr. Cummings did
10 of grantees of CTR, in which they reported back their
11 opinions on various issues, such as whether smoking
12 causes disease and whether their research was or was
13 not related to investigation of smoking and health.
14 As such, it is not original work, typical of
15 the medical journal-type articles we've been
16 discussing. This is pure hearsay within hearsay. It
17 purports to report back on what other people have said
18 in response to a survey.
19 THE COURT: All right. The people who did
20 the survey, the initial people who did the survey, are
21 the grantees, right?
22 MR. MOODHE: No.
23 MR. HEIM: No.
24 MR. MOODHE: Dr. Cummings sent out a
25 questionnaire, a survey to the CTR grantees, asking

1 them a series of questions about what they think on
2 matters relating to whether smoking causes disease.
3 THE COURT: Okay, but is that based on their
4 findings or their personal beliefs?
5 MR. HEIM: Personal beliefs.
6 MR. MOODHE: Personal opinions.
7 THE COURT: So he's doing his own research.
8 What he's doing is making the same kind of research he
9 did when he asked people: Why do you smoke or what
10 brand do you use?
11 He's doing his own research, polling people,
12 and the results of the poll are --
13 MR. ROSENBLATT: And Mr. Moodhe --
14 MR. HEIM: Hearsay.
15 MR. ROSENBLATT: And Mr. Moodhe
16 cross-examined about this in the Broin case. The same
17 article came in and he cross-examined --
18 THE COURT: Big difference -- if what they're
19 saying is: What did your research show, that's one
20 thing. You are talking about the grantees' research.
21 But that's not what he is talking about.
22 He's talking about there were personal
23 beliefs not based upon what their work was. But on his
24 personal belief.
25 MR. MOODHE: Well, there is a portion of the

1 survey that goes to that work. One portion of the
2 survey goes to whether they think their work is related
3 to smoking and health. But it doesn't make it any less
4 hearsay within hearsay just because he conducted the
5 survey and it purports to be a poll. It's still
6 hearsay within hearsay.
7 THE COURT: Well, that's a finding of his own
8 research.
9 MR. MOODHE: It's a report of their opinions.
10 THE COURT: Well, that's what research is.
11 You know, I mean, there's all kinds of research, and
12 the research is: What do you think about the current
13 situation in politics?
14 That's somebody else's thought process. But
15 there is a poll, and you can get definitive, the
16 demographics from it; you can get all kinds of data --
17 data, whatever you want to call it -- from that. Not
18 necessarily the fact that it just happens to be
19 somebody's opinion. But that's the reason for it.
20 So if what he's doing is getting a bunch of
21 opinions and compiling it and getting results and a
22 certain percentage say yea, a certain percentage say
23 nay. If that's what he's talking about, I don't have
24 any problem with that. Overruled.
25 (The sidebar conference was concluded, and

1 the following proceedings were held in open court:)
2 Q. Okay. Dr. Cummings, the title of your
3 article which appeared in the American Journal of
4 Public Health is: What Scientists Funded by the
5 Tobacco Industry Believe About the Hazards of Cigarette
6 Smoking.
7 Now, based on your research, based on your
8 polling, based on your survey, what were your findings
9 on that question, as to what scientists funded by the
10 tobacco industry believe about the hazards of cigarette
11 smoking?
12 A. What we found was that the scientists -- and
13 these were scientists who had received money from the
14 Council for Tobacco Research -- that we had surveyed,
15 overwhelmingly believed that smoking was a cause of
16 premature mortality, lung cancer, heart disease and
17 emphysema.
18 In fact, when we asked the question, was
19 there sufficient evidence for drawing a causal
20 conclusion to that question, we just asked them to
21 check off strongly agree, agree, disagree, strongly
22 disagree. They were all in the "strongly agree" or
23 "agree" mode, over 90 percent.
24 In fact, they also believed that smoking was
25 an addiction. Because we asked them the question on

1 addiction as well.

2 Q. How did you get the names of the particular
3 scientists and experts you were going to survey? And
4 how did you know that they had, in fact, received money
5 from the Council for Tobacco Research to fund their own
6 research?

7 A. We basically went to the annual report from
8 the Council for Tobacco Research and identified the
9 names of grant recipients that were listed for the '89
10 report. And we surveyed only the scientists in the
11 United States, which was 99 percent of the group, and
12 sent them a survey.

13 We got back not quite half of the surveys
14 from the respondents, and we wrote up the results. We
15 did a little comparison to see whether there was any
16 bias that might exist between the respondents and
17 nonrespondents.

18 And then we wrote up an article and sent it
19 into the American Journal of Public Health, because
20 what stimulated this research idea was I work at a
21 cancer hospital. I mean, there is no controversy about
22 smoking as a cause of cancer among the scientists at
23 Roswell Park, including some scientists who have taken
24 money from the Council for Tobacco Research. They
25 believe that smoking causes cancer.

1 MR. NEWSOM: Objection. Hearsay, Your Honor.

2 THE COURT: This is based upon the results of
3 that survey.

4 MR. NEWSOM: No. He's talking about people
5 at Roswell Park.

6 MR. ROSENBLATT: His own institution.

7 THE COURT: Well, that's a difference.

8 THE WITNESS: To try to give a little
9 background --

10 THE COURT: No. You can't give a little of
11 this and a little of that.

12 I will sustain the objection.

13 The jury will disregard the results of
14 anything related to Roswell Park at this point. And
15 only as a result of the survey you are talking about.

16 THE WITNESS: As a result of the survey,
17 there was no controversy, even among the scientists
18 funded by the Council for Tobacco Research.

19 Most of their abstracts, by the way, had
20 nothing to do with smoking and cancer.

21 BY MR. ROSENBLATT:

22 Q. What was the focus -- what has been the focus
23 of most of the research funded by the Council for
24 Tobacco Research over the years?

25 MS. LUTHER: Objection. Foundation.

1 MR. HEIM: Objection, Your Honor.

2 THE COURT: Foundation. Sustained for
3 foundation.

4 BY MR. ROSENBLATT:

5 Q. Have you made a study of the types of
6 projects funded by the Council for Tobacco Research
7 over the years as part of your general research
8 efforts, as part of your general presentations that you
9 make in connection with your work?

10 MR. NEWSOM: Your Honor, this study was
11 limited to one year.

12 THE COURT: I don't know, talking about this
13 study? This is a general foundation.

14 MR. ROSENBLATT: Correct.

15 A. It's part of the study that we did, the
16 papers we wrote. We looked at the mission statement to
17 the Council for Tobacco Research, and the mission
18 statement was to study the alleged relationships -- to
19 get the facts on the alleged relationship between
20 smoking and the various diseases that had been touted
21 to be linked to smoking.

22 And so we've looked at the titles of
23 abstracts, going back to the early reports from the
24 Council for Tobacco Research. We did a simple word
25 search to see whether the words "smoking," "nicotine,"

1 "cigarettes," "tobacco," showed up in any of the
2 titles, because you would have smoking and whatever
3 disease: cancer, emphysema, heart disease.

4 Less than 6 percent of the titles that we
5 found, dating back to 1957, have had the word
6 "cigarette," "tobacco," "smoking" in the title of the
7 abstracts. These abstracts largely deal with
8 biomedical questions, that in my opinion have very
9 little to do with smoking and health.

10 MR. HEIM: Objection, Your Honor.

11 THE COURT: Overruled.

12 MR. HEIM: He's now testifying as to the
13 titles of what the articles said.

14 THE COURT: Overruled.

15 MR. ROSENBLATT: I will move on to another
16 subject, Judge.

17 THE COURT: Time for a break?

18 MR. ROSENBLATT: Yes.

19 THE COURT: Let's take a break, folks. We
20 have some work that we have to do, too, so we will take
21 about 15 minutes.

22 (The jurors exited the courtroom.)

23 THE COURT: We'll take five minutes or so.

24 During the break, you must not discuss your
25 testimony or anything about this case with anybody.

1 including the lawyers.
 2 THE WITNESS: Okay.
 3 (A brief recess was taken.)
 4 THE COURT: Okay. Now, I think, Doctor, you
 5 will have to step out for a few minutes.
 6 MR. ROSENBLATT: If we're going to go over
 7 the slides, he's probably the best person that can
 8 explain.
 9 THE COURT: I will find out what the
 10 objections are.
 11 MR. ROSENBLATT: I'll come get you when we
 12 start showing slides, or maybe we want to see the
 13 slides before they object.
 14 THE COURT: I don't know.
 15 MR. ROSENBLATT: Would it make sense for
 16 Dr. Cummings to kind of go through them?
 17 THE COURT: How many slides do you have to
 18 begin with? Is what we're talking about 25, 30,
 19 thereabouts?
 20 MR. ROSENBLATT: 30.
 21 THE COURT: Okay.
 22 MR. ROSENBLATT: And he told me, Judge, that
 23 he had them divided into categories.
 24 THE COURT: I guess I'll have to come down
 25 here to take a look. Is there any way you can just --

1 MR. HEIM: Judge, I don't know whether this
 2 is a help or not. This is a description of the slides
 3 that someone put together, just a description of what
 4 they were.
 5 THE COURT: I guess we'll just have to take a
 6 look and go through this.
 7 MR. ROSENBLATT: Let me get him in, Judge.
 8 MR. HEIM: Judge --
 9 THE COURT: We'll see. There are a lot there
 10 that I look at and I have questions. I'll see what he
 11 wants to do, without the jury.
 12 MR. HEIM: Mr. Newsom knows more about these
 13 slides than I do. He's here.
 14 THE COURT: Let's see which ones we are
 15 talking about.
 16 MR. HEIM: We didn't see the slides, so we
 17 will do it as we go along.
 18 THE COURT: I'll step down over here so I can
 19 see the projection. What we're going to do, if you
 20 would, is run through them rather quickly so I get an
 21 idea of what they are and briefly why you're showing
 22 that particular slide.
 23 From the description I just looked at on some
 24 of these slides, I question what they are. So I want
 25 to see what they look like.

1 Is this part of a lecture you have given?
 2 THE WITNESS: Parts of it, and parts of it
 3 are some of my research that I've done, and some of it
 4 is in the context of some of the work that's been done
 5 at Roswell Park in terms of the smoking and health.
 6 So it shows the background of some of the
 7 work that I inherited when I came to Roswell Park. But
 8 this first part here is --
 9 THE COURT: I don't have any problem with
 10 that, I don't think.
 11 THE WITNESS: -- focused on our work on the
 12 design of cigarette; shows what a tobacco leaf looks
 13 like.
 14 And when we talk about tobacco, the fact that
 15 most people have no idea that cigarettes include, in
 16 fact, paper material --
 17 THE COURT: Wait a minute. Before you start
 18 getting to that, anytime you want to object or --
 19 MR. NEWSOM: We object to that one.
 20 Characterizing in a very misleading way by being
 21 "soaked in pesticides, saturating with secret coloring,
 22 bug-infested drying barns," nothing he has expertise
 23 in.
 24 MR. ROSS: Also, it's totally beyond his
 25 expert disclosure. Nothing disclosed that he's going

1 to testify about how cigarettes are made or materials
 2 or anything else in his disclosure.
 3 MR. ROSENBLATT: That's not true, Judge. On
 4 Dr. Cummings' deposition he greatly expanded the
 5 disclosure.
 6 MR. ROSS: You can't do that, Judge. Here is
 7 his disclosure. (Handing)
 8 MR. NEWSOM: In fact, there was a second
 9 disclosure that's even more limited. There was a
 10 supplemental disclosure, which was actually more
 11 limited.
 12 THE COURT: Okay.
 13 THE WITNESS: I can explain the context of
 14 this. This relates to nicotine delivery in the product
 15 and nicotine addiction.
 16 THE COURT: Yes, but there are other things
 17 in there. "Soaked in pesticides" right off the bat
 18 would be a problem.
 19 THE WITNESS: I can demonstrate without the
 20 slide, if you like, the reconstituted, for example, in
 21 Marlboro cigarettes. We can do a float test --
 22 THE COURT: We might do that. This
 23 particular one we can eliminate. You have to eliminate
 24 it. Okay.
 25 MR. NEWSOM: That's his characterization of

1 being a "secret fire-retarding chemical."
 2 THE WITNESS: Most people are not aware of
 3 the chemicals put on the paper to control the burn
 4 rate.
 5 MR. NEWSOM: It's an effort to make it read
 6 in a prejudicial way.
 7 THE COURT: I know. It's the use of the
 8 terms they're getting all annoyed about.
 9 If you had said "treated with fire-retardant
 10 chemicals," that would be one thing. But a "secret
 11 fire-retardant chemical," naturally you're going to get
 12 an objection.
 13 MR. NEWSOM: There is no issue in this case
 14 as to whether the chemicals are secret or not, or
 15 anything about the paper.
 16 THE WITNESS: Also related to nicotine
 17 delivery, because the temporary --
 18 THE COURT: It's the "secret" part of it. So
 19 eliminate that one.
 20 THE WITNESS: This relates to our work on
 21 cigarette filters.
 22 THE COURT: Okay. That's fine.
 23 I know you object to it.
 24 MR. NEWSOM: It's about doing nothing to
 25 reduce the danger.

1 THE COURT: That's what everybody says.
 2 Okay. That's his testimony. That's from his research.
 3 Fine.
 4 THE WITNESS: This is a picture of the
 5 cigarette butt.
 6 THE COURT: Fine.
 7 THE WITNESS: This is a cigarette filter
 8 fiber harvested out of the lung of a smoker.
 9 THE COURT: That's fine.
 10 THE WITNESS: This is just a list of the
 11 chemicals, just a partial list.
 12 MR. NEWSOM: Characterizing as poisons.
 13 THE COURT: We've had testimony about that.
 14 Okay. That's all right.
 15 THE WITNESS: This is a smoking machine at
 16 Roswell Park Institute.
 17 THE COURT: Okay.
 18 THE WITNESS: This is the amount of tar that
 19 a smoker would consume in the equivalent of a pack a
 20 day for one year.
 21 MR. NEWSOM: Your Honor, that's nothing like
 22 what the smoker would actually absorb. It's in a
 23 flask.
 24 THE COURT: You can cross-examine him about
 25 it.

1 THE WITNESS: This is from our mouse painting
 2 experiments done at Roswell Park in the '60s.
 3 MR. NEWSOM: He didn't do any of the mouse
 4 painting experiments.
 5 THE WITNESS: I inherited this material.
 6 THE COURT: This is what it was. This is
 7 what a mouse painting looks like. He's not going to
 8 get into going into results that he didn't do. But if
 9 this is what they did --
 10 MR. NEWSOM: If that's understood, that he's
 11 not going to get into the results of studies he didn't
 12 do --
 13 THE COURT: All right.
 14 MR. SCHNEIDER: There is no foundation or
 15 authentication for the last slide. This witness is not
 16 a toxicologist, doesn't have a degree in that field.
 17 He should not be allowed to put up a slide and explain
 18 it.
 19 MR. HEIM: What did you do, Judge?
 20 THE COURT: I left it in. What's wrong with
 21 that?
 22 MR. HEIM: I didn't have a chance to look at
 23 it.
 24 THE WITNESS: These are pictures of cilia in
 25 the airway of a nonsmoker. These are healthy cilia.

1 This is the contrast of the cilia in a cigarette smoker
 2 which shows they are paralyzed.
 3 MR. NEWSOM: Your Honor, he has no expertise
 4 to testify about this if he didn't make the slides.
 5 THE COURT: This is part of your study and
 6 review.
 7 THE WITNESS: This is part of what I do. I
 8 explain this to thousands of people.
 9 MR. NEWSOM: He didn't take the slides.
 10 THE COURT: Doesn't have to take the slides
 11 to be able to explain it.
 12 What's wrong with you people?
 13 THE WITNESS: This is showing a lung on the
 14 left half of a nonsmoker, and a smoker on the right.
 15 The whitish part is the cancer on the lung.
 16 This is a new series. This is on some of our
 17 advertising work. This is an ad from Parent Magazine.
 18 We don't advertise to children. This is from
 19 RJ Reynolds.
 20 THE COURT: Wait, wait.
 21 MS. LUTHER: Judge, could we go back two
 22 slides? The slide before had subtext that I couldn't
 23 read at the bottom.
 24 THE COURT: The one before that?
 25 MS. LUTHER: Yes, the one right before. It's

1 all the way — it's at the bottom.
 2 THE COURT: Who can read that? Anybody know
 3 what it says?
 4 MS. LUTHER: "According to the American Lung
 5 Association, if you smoke, your chances of dying of
 6 lung cancer are 700 times those of nonsmokers. If you
 7 smoke, this could be your lung. Think about it. The
 8 next time you light a cigarette, if there is a next
 9 time" —
 10 THE COURT: You have to understand, he's in a
 11 teaching mode. He's in a mode to talk to people about
 12 the dangers of smoking.
 13 This is what he does for a living. This is
 14 what he does in his presentation. If that's what he
 15 does, that's what he does. I mean —
 16 THE WITNESS: That's what I do.
 17 MR. ROSS: Your Honor, I thought we already
 18 had a ruling that this witness wasn't going to be
 19 testifying about causation.
 20 THE COURT: He's not.
 21 MR. NEWSOM: That's what the slide points to.
 22 MR. ROSS: All these slides are: This is
 23 what smoking does to your lung. That is causation.
 24 THE COURT: Not on a scientific level. It's
 25 just a teaching aid, basically is what it is.

1 MR. ROSS: Then why are we telling this to
 2 the jury if it's not testimony about causation?
 3 THE COURT: Go ahead.
 4 MS. LUTHER: With regard to that —
 5 THE COURT: I don't know about these last
 6 two.
 7 MR. NEWSOM: Wait, wait.
 8 MS. LUTHER: It has RJR at the bottom.
 9 MR. NEWSOM: It's a Reynolds —
 10 MR. HEIM: Can we put it down so we can read
 11 it?
 12 THE COURT: Nobody can read that.
 13 MR. KIRBY: There is no foundation or
 14 authentication for it. It would be improper to show it
 15 to the jury.
 16 THE COURT: Where did this come from?
 17 THE WITNESS: Parent Magazine.
 18 THE COURT: Do you have a copy of it other
 19 than the slide?
 20 THE WITNESS: I don't have the hard copy of
 21 it with me.
 22 THE COURT: Okay. How do we know it came
 23 from Parent Magazine?
 24 THE WITNESS: Because I took this out of
 25 Parent Magazine and made a slide out of it.

1 THE COURT: You personally did?
 2 THE WITNESS: Yeah.
 3 THE COURT: Move to the next.
 4 MR. KIRBY: Your Honor, we have an objection
 5 to the last slide.
 6 MR. HEIM: He hasn't ruled on it.
 7 THE COURT: I didn't know if they were the
 8 same, if that is part of it.
 9 This is something different now?
 10 THE WITNESS: Yes.
 11 THE COURT: Let's go back to the other one.
 12 What is your objection to that?
 13 MR. KIRBY: Foundation, hearsay. The
 14 document is not in evidence. It's improper to show the
 15 substance of it.
 16 THE COURT: How are you going to get it into
 17 evidence until we start talking about it?
 18 MS. LUTHER: It's not prepared by any of the
 19 tobacco companies, Judge.
 20 THE COURT: It says on the bottom, RJR.
 21 MS. LUTHER: Read the article. It says: Who
 22 are you kidding? The newspapers and magazines and
 23 billboards are filled with cigarette ads. Kids can't
 24 help but see them. How can you expect us to believe
 25 you're not trying to reach —

1 MR. KIRBY: Your Honor, the point is there
 2 must be —
 3 THE COURT: Who wrote it? That's the point.
 4 If RJR produced it and put it in Parent Magazine for
 5 the public, then what?
 6 MR. ROSENBLATT: That's Reynolds' ad, Judge.
 7 THE COURT: If that was produced by RJR, how
 8 can you complain about it?
 9 MR. KIRBY: I can complain about it because
 10 there is no proper foundation for its admissibility.
 11 It's also not relevant. There's no testimony about
 12 why — there's no offer as to why this is relevant.
 13 THE COURT: First of all, "We don't want
 14 young people to smoke." That's not relevant?
 15 MR. KIRBY: What's it relevant to in a common
 16 issue phase?
 17 THE COURT: Youth smoking. If he's going to
 18 testify that he took that out of a magazine himself,
 19 clipped it out and made the slide himself, that's good
 20 enough.
 21 What is that?
 22 THE WITNESS: These are quotes that we've
 23 extracted from documents as part of my research on
 24 marketing of tobacco to youth.
 25 MR. NEWSOM: None of these documents are in

1 marketing of tobacco products, and some of our work on
2 cigarette design.

3 Q. Okay. So why don't you come down and start
4 at the beginning.

5 THE COURT: Some of this stuff may be
6 difficult for you to see. There will be some slides
7 which have some writing on it, which are very difficult
8 to read, especially if you're way back over on this
9 end.

10 So just be more or less advised that it's
11 there for a presentation in general, a general
12 presentation, not very specific, every word.

13 A. I use this particular slide, Anatomy of a
14 Cigarette, when I introduce the concept to groups, that
15 cigarettes are not a simple, little device where you
16 just chop up tobacco and roll it in a piece of paper
17 and put it in your mouth; that it's actually a
18 highly-engineered product, and -- but most people think
19 that cigarettes are just tobacco leaves blended
20 together like a wine maker would make wine. It's
21 really not that at all. It's a very scientific process
22 they go through.

23 In order to introduce people, particularly in
24 Buffalo, New York, where I do many of these
25 presentations -- people don't even know what tobacco

1 is. This is actually some pictures of tobacco leaves.

2 And it's interesting to note, when I show
3 this slide, if you were to take these leaves and test
4 them for nicotine content, you would find the amount of
5 nicotine to vary, would vary quite a bit from leaf to
6 leaf.

7 So if you were to simply take tobacco leaves,
8 chop them up and roll it in a piece of paper and smoke
9 it, you would find on some cigarettes you would get a
10 lot of nicotine, and others you would get hardly any.
11 It would not be uniform.

12 That's not the case in cigarettes that are
13 sold on the shelf today. Each cigarette is designed to
14 give you the precise amount of nicotine that the pack
15 will tell you.

16 And that's important, because people, in
17 fact, I believe smoke for the nicotine that they're
18 getting in the cigarettes.

19 In fact, there are elements of cigarettes
20 that the tobacco itself -- I will go back to that
21 particular slide on tobacco. Much of the tobacco
22 that's in a cigarette today, or a percentage of the
23 tobacco that's in cigarettes today, is not even real
24 tobacco; it is processed material called reconstituted
25 tobacco, which goes through a series of extraction

1 processes.

2 It's basically like a piece of paper treated
3 with tobacco extract, which is a way of providing a
4 uniform delivery system for nicotine. They grind up
5 the materials, the stems, the stalks --

6 MR. HEIM: Your Honor, this is the narrative
7 approach that I objected to two minutes ago, five
8 minutes ago.

9 BY MR. ROSENBLATT:

10 Q. Is this pretty much what you do in your
11 presentation?

12 THE COURT: We're going to cut the lecture
13 short. Okay?

14 THE WITNESS: I'm trying to get through it
15 quickly.

16 THE COURT: I understand. But be advised
17 that the jury has already been advised of all this
18 information from other sources, witnesses at trial. So
19 they are pretty much familiar with what you are saying.

20 THE WITNESS: Okay.

21 A. (Continuing) At any rate, there actually is
22 a very simple test you can do to see how much is real
23 and how much is the paper tobacco in a cigarette.

24 One of the things I explain to people when I
25 talk to them is you can take the tobacco out of a

1 column, drop it in a glass of water and see it
2 separate.

3 The fake tobacco, the reconstituted paper
4 tobacco, sinks to the bottom. The color of the water
5 will change to a brown or yellow color because of the
6 coloring agents that are applied to the reconstituted
7 tobacco, and the real tobacco will float on the
8 surface. Real tobacco has a little wax on the leaves
9 that causes it to float.

10 We also talk about the filter in a cigarette.
11 And you heard me earlier talking about some of our
12 research on filter defects.

13 Cigarette filters are made out of cellulose
14 acetate, paper, plastic and glue, a plasticizer that
15 is used to glue and get the fibers to adhere together.

16 I mentioned earlier today that if you look at
17 a Marlboro cigarette under a high-powered microscope,
18 this is what you'll see, the fibers literally dangling
19 off the end.

20 We've done a number of studies to look at how
21 easily the fibers come off. I mentioned the tongue
22 test, where you can touch it to your tongue. We've
23 done it with beef liver because we didn't want people
24 actually exposed to the fibers.

25 The fibers, when you smoke the cigarette, get

1 tar adhering onto them. The whitish appearance is
2 caused by the milky pigment, titanium dioxide that they
3 paint on the fibers.

4 The tipping paper, which is the brown paper
5 that you put in your mouth that gives it some sort of
6 the cork-colored appearance found on many cigarettes,
7 is actually unique, too, because if you were to put a
8 piece of paper in your mouth repeatedly, seven or eight
9 times, as a smoker would do, the piece of paper would
10 fall apart because of the moisture to the paper.

11 Of course, this does not happen because of
12 the silicon that is sprayed on the outside of the paper
13 to prevent the paper from falling apart.

14 And smokers are rather surprised to find that
15 when they are smoking a filtered cigarette, that they
16 are, in fact, getting exposed to fibers.

17 This is a filter fiber we have harvested out
18 of the lung tissue of a smoker at Roswell Park. We
19 find quite a number of these fibers in the lung tissue.
20 You can see it's coated with the tar from the
21 cigarette.

22 Those are macrophages, lung cells in the lung
23 of this individual, that are adhering to this foreign
24 material. A plastic in your lungs is never going to go
25 away. Plastic filter fibers will never go away in your

1 a radioactive material.

2 Tobacco plants tend to concentrate things
3 from the soil, radioactive material, which occurs
4 naturally in the soil, plus certain fertilizers used
5 for growing tobacco break down into radioactive
6 material which is why we find the Polonium-210 in
7 cigarettes.

8 This is a picture of a cigarette machine that
9 we used to have at Roswell Park Cancer Institute. As I
10 mentioned, during the '50s we did a lot of the work on
11 measuring tar and nicotine and carbon monoxide content
12 of cigarettes. In fact, we did produce a list for the
13 public that came out before this was mandated by the
14 federal government.

15 This is a pump at the bottom that's going to
16 be pulling out all these cigarettes. We actually
17 labeled this thing "Pete the dragon," because we would
18 load up Pete with all the cigarettes; we would light
19 them up, and the pump would pull the cigarettes through
20 simulating what a smoker would be doing in terms of the
21 puff and puff volume they would be getting.

22 This is just to show you how much tar you
23 would get from a pack-a-day smoker for one year's worth
24 of smoking.

25 So, if you were smoking 365 days out of the

1 lungs, because your lungs are a sterile environment and
2 plastic doesn't biodegrade easily.

3 But the plastic filter fibers probably stay
4 in the lungs of smokers, which may account for the
5 effects that you see in the lung, in terms of
6 long-term; even ex-smokers who quit and years later
7 develop serious lung disease.

8 The macrophages are for attacking this,
9 because it represents an immunologic response, and they
10 are attacking the foreign material, not only the tar.

11 You can see the tar from the fiber has
12 migrated onto the surrounding cells.

13 MR. HEIM: Your Honor, move to strike the
14 last as speculative, unsupported, lack of foundation.

15 THE COURT: Overruled.

16 A. (Continuing) This is just a list of some of
17 the chemicals you find in cigarette smoke.

18 We do this for the public because most of the
19 chemicals that you find in cigarette smoke have been
20 identified because most of the words are so long, the
21 words are difficult to pronounce. So we've taken a
22 smaller list and applied it to some of the common
23 things people may be aware of, such as floor cleaner
24 for ammonia; lighter fluid for butane; hydrogen
25 cyanide, which is poisonous gas; Polonium-210, which is

1 year for one year, that's the equivalent amount of tar
2 that a smoker would be extracting from the cigarettes
3 that they are getting. That's equivalent to roughly a
4 coffee cup full of tar.

5 Years ago, back in the '50s again, when we
6 didn't know what was perhaps causing the higher rates
7 of cancer and this link between smoking that had been
8 observed, they began to look at tar as one of the
9 possible causes. And so we did mice painting
10 experiments at Roswell Park.

11 This is a picture from one of the studies
12 that was done at Roswell, where we're painting up the
13 back of a -- we would shave the mouse and paint the tar
14 on the back.

15 And this is just showing you what happens to
16 the skin of a mouse when you paint it up with the tar.
17 That's a tumor that's been caused by the tar.

18 Now the stuff obviously goes into your lungs,
19 and when I talk to groups, I talk to them about your
20 lungs are sort of like a plumbing system. You have a
21 tube that goes down your airways, and your lungs -- the
22 airways get smaller and smaller the further down you go
23 in the airways, the peripheral part of the airways.

24 At the end of those airways you have air
25 sacs. Air sacs are important for gas exchange.

1 BY MR. ROSENBLATT:

2 Q. What was said?

3 A. If smoking was so bad, Dr. Cummings, why do
4 cigarette companies allow their logos to be used on
5 toys and candy products? These were fifth graders.
6 And I said, I don't really know. Why don't you write
7 them?

8 And they subsequently wrote to all of the
9 tobacco companies to ask them that question, and this
10 was a response that they received back from the RJ
11 Reynolds Tobacco Company.

12 Q. Addressed to who?

13 A. This was addressed to the principal of the
14 school, and I had lectured to the fifth grade class and
15 had been invited into that class by Beverly Shipe, who
16 is the school nurse.

17 Q. So you suggested that the kids in the fifth
18 grade write a letter to the tobacco companies to answer
19 the question, and did they, as far as you know?

20 A. No. The only letter that was received back
21 from the tobacco companies was this particular letter
22 from RJ Reynolds.

23 Q. Okay. But did the kids write to the tobacco
24 companies?

25 A. Yes.

1 Q. Okay. And how was that letter brought to
2 your attention?

3 A. I received it from Beverly Shipe, who had
4 gotten it from her school principal.

5 Q. Beverly Shipe being the school nurse?

6 A. That's right.

7 MR. ROSENBLATT: I'd like to offer that
8 letter in evidence, Judge.

9 THE COURT: Admitted.

10 MR. KIRBY: Your Honor, for the record, we
11 object to relevance and 403 objection.

12 THE COURT: Overruled.

13 (Plaintiffs' Exhibit 163 was admitted into
14 evidence.)

15 BY MR. ROSENBLATT:

16 Q. Now, this letter on the stationery of RJ
17 Reynolds Tobacco Company is signed by Joe M. Spach,
18 S-p-a-c-h, manager of public information, public
19 relations department, to the principal of the Willow
20 Ridge School. The date of the letter is January 11th,
21 1990.

22 Let me direct your attention on the first
23 page to the -- to the fourth paragraph. Well, actually
24 the bottom paragraph, where the letter says: Despite
25 all of the research going on, the simple and

1 unfortunate fact is that scientists do not know the
2 cause or causes of the chronic diseases reported to be
3 associated with smoking.

4 Is that a true statement or a false
5 statement?

6 A. That is a false statement.

7 Q. And why do you say that?

8 A. Because I believe that scientists do know the
9 causes of many of the diseases that are related to
10 smoking, and smoking is that cause, for lung cancer,
11 emphysema. There's not a controversy going on as
12 actually my research with the Counsel for Tobacco
13 Institute scientists, scientists funded by the tobacco
14 industry, even they believe that, and yet this
15 statement was made in 1990. I think it's a blatant
16 lie.

17 MR. NEWSOM: Objection.

18 MR. KIRBY: Objection, Your Honor, move to
19 strike.

20 THE COURT: Well, the objection is to the use
21 of the word lie.

22 Let's talk about that.

23 (The following proceedings were had at
24 sidebar:)

25 THE COURT: What's your objection?

1 MR. KIRBY: Well, Your Honor, he can testify
2 as to his opinion, as to whether there is -- what the
3 known cause of certain diseases are. The jury can
4 compare and contrast that with a document that is in
5 simple English. And for him to sit here, and he just
6 testified in his opinion it was a blatant lie, it
7 invades the province of the jury, and it's unduly
8 prejudicial.

9 There's really no such thing as a truth
10 witness. The letter says what it says. The jury can
11 read it. He can testify as to whether he thinks that
12 the cause of certain diseases is known, and then the
13 jury can draw whatever inference they choose to draw
14 from it.

15 THE COURT: There's been a case, recent case
16 on this issue of lying by using the term lie because
17 everybody jumps up and down when somebody says lie, and
18 basically they referred to somebody calling somebody a
19 liar. But if the evidence and the facts in the case
20 are based on a lie, then you can use the word lie, if
21 something we're talking about here is something he
22 knows is false and if he uses the term false or the
23 word lie, what's the difference?

24 MR. KIRBY: Your Honor, it's no different.

25 I'm not familiar with the case you're referring to, but

Page 16417	Page 16419
<p>1 it's no different than him saying we are liars. 2 THE COURT: No, it's different. 3 MR. KIRBY: Because we wrote the letter -- 4 it's a distinction of that letter. 5 THE COURT: Not really. 6 MR. HEIM: Judge, we've, again, discussed 7 this several times before, and I know you've heard 8 Mr. Moss on this subject many times, but the difference 9 is that this witness doesn't have any special expertise 10 other than to say -- and he, actually, shouldn't even 11 be saying -- testifying on causation, but he can say 12 that, in my view, causation has been well-established. 13 THE COURT: He's already said that. 14 MR. HEIM: And he's already said that, right. 15 And he can say, so, this -- he can say he disagrees, 16 but he is no special expert to make judgments about 17 truth and falsity and lying and not lying. And it 18 turns every witness into somebody who can do that. 19 THE COURT: I think he can say, after my 20 research and all of the information I have, a statement 21 of that nature is false because or whatever. 22 MR. NEWSOM: There's been no foundation for 23 it. 24 THE COURT: He uses the word lie as a trigger 25 word. I understand that.</p>	<p>1 subjectives. 2 THE COURT: I think he can say that the 3 statement is false, if it's false in his opinion, based 4 on his research. 5 MR. KIRBY: He said that already. 6 THE COURT: Yes. I know. 7 MR. KIRBY: He's already said that. What's 8 the ruling? 9 (The sidebar conference was concluded, and 10 the following proceedings were held in open court:) 11 THE COURT: Okay. The jury will disregard 12 the last statement, vis-a-vis the word lying. 13 You can go ahead and ask a question. 14 BY MR. ROSENBLATT: 15 Q. Dr. Cummings, I'm going to ask -- I'm going 16 to read a statement contained in this letter, and I 17 want to know, based on your research, based on your 18 background and experience, whether this statement is 19 simply true or false, in your opinion. 20 Quote: Despite all of the research going on, 21 the simple and unfortunate fact -- fact -- is that 22 scientists do not know the cause or causes of the 23 chronic diseases reported to be associated with 24 smoking. 25 Is that a true statement or a false</p>
Page 16418	Page 16420
<p>1 MR. ROSENBLATT: It really shouldn't be, 2 because it's the equivalent when you ask is that true 3 or false and a person says false. It's the same thing. 4 I mean, I -- 5 MR. HEIM: It's more than that, because to 6 make a statement that it's a lie is deliberate and 7 false. 8 THE COURT: Lie involves intent. 9 MR. HEIM: Yes. 10 THE COURT: I have a little problem with the 11 issue of lie. 12 MR. KIRBY: Your Honor, it's a "blatant lie." 13 THE COURT: Well, that's what he said. Yes. 14 I understand. 15 MR. NEWSOM: And, Your Honor, he's never laid 16 any sort of foundation for this witness to give any 17 kind of testimony on causation. He is an expert in 18 health education and health behavior, which doesn't 19 qualify. 20 THE COURT: I believe in his research that 21 statement is false, that's as far as I'm going to let 22 him go. So, disregard the word lying. 23 MR. NEWSOM: And blatant. 24 MR. HEIM: I think we'll just take lying, 25 because he shouldn't be doing -- getting into</p>	<p>1 statement? 2 A. That's a false statement. 3 Q. The letter goes on to say -- and the date of -- 4 the letter is January 11, 1990 -- the answers to the 5 many unanswered controversies surrounding smoking and 6 the fundamental causes of the diseases often 7 statistically associated with smoking, we believe can 8 only be determined through much more scientific 9 research. 10 My question to you is, in 1990, based on your 11 research, your experience, your training, was any more 12 research needed on the question of whether cigarette 13 smoking causes cancer and other diseases? 14 A. No. 15 Q. Now, a letter, I believe, which is in 16 evidence, Judge, Engle Exhibit 199, from J.B. Mann of 17 the public relations department dated May 1, 1963 -- 18 MR. HEIM: Your Honor, before we get to that, 19 can we have the second paragraph read on this letter so 20 that it answers the question that was put? 21 THE COURT: You can read it if you want. I 22 mean, you're talking about -- let me see this. 23 This is the letter you're talking about? 24 MR. HEIM: Yes, sir. 25 THE COURT: The second paragraph?</p>

1 MR. HEIM: Second paragraph.
 2 MR. KIRBY: Your Honor, in fact, the letter
 3 is very short, and --
 4 THE COURT: He doesn't have to read it all.
 5 MR. KIRBY: In view of completeness, we would
 6 request the letter be read.
 7 THE COURT: You can read it on cross.
 8 MR. ROSENBLATT: I'll be happy to read the
 9 whole letter.
 10 THE COURT: All right. Read the whole thing.
 11 MR. ROSENBLATT: Okay.
 12 January 11, 1990, to the principal of Willow
 13 Ridge School.
 14 Dear sir or madam: A number of your fifth
 15 grade students have written RJ Reynolds Tobacco
 16 Company, commenting that they do not feel our company
 17 should allow the use of our brand names on children's
 18 toys and candy cigarettes. As information, RJ Reynolds
 19 Tobacco Company's policy is not to allow our brand
 20 names to be used on toys or candy cigarettes, and any
 21 current use of our brand names in this fashion is not
 22 sanctioned by our company.
 23 Some of the students also commented about the
 24 controversies surrounding cigarette smoking. The
 25 tobacco industry considers smoking to be a custom for

1 those adults who derive pleasure from it. We believe
 2 that whether to smoke or not is a decision that should
 3 be freely made by individuals who have reached the age
 4 of mature judgment. Accordingly, our advertising is
 5 directed to adult smokers and not younger people.
 6 The tobacco industry is also concerned about
 7 the charges being made that smoking is responsible for
 8 many -- for so many serious diseases. Long before the
 9 present criticism began, the tobacco industry, in a
 10 sincere effort to determine what harmful effects if
 11 any, smoking might have on human health, established
 12 the Council for Tobacco Research U.S.A. The industry
 13 has also supported research grants directed by the
 14 American Medical Association.
 15 Over the years, the tobacco industry has
 16 given in excess of 162 million dollars to independent
 17 research on the controversies surrounding smoking, more
 18 than all of the voluntary health associations combined.
 19 Despite all of the research going on, the
 20 simple and unfortunate fact is that scientists do not
 21 know the cause or causes of the chronic diseases
 22 reported to be associated with smoking.
 23 The answers to the many unanswered
 24 controversies surrounding smoking and the fundamental
 25 causes of the diseases often statistically associated

1 with smoking, we believe can only be determined through
 2 much more scientific research. Our company intends,
 3 therefore, to continue to support such research in a
 4 continuing search for answers.
 5 We would appreciate your passing this
 6 information along to your students. You may also be
 7 interested in the enclosed publications, presenting the
 8 position of our company and the tobacco industry on the
 9 issue of youth smoking.
 10 Sincerely Joe F. Spach, manager, public
 11 information, public relations department.
 12 BY MR. ROSENBLATT:
 13 Q. Now, this letter, one of the sentences I just
 14 read is, the tobacco industry considers smoking to be a
 15 custom for those adults who derive pleasure from it.
 16 Based on your research, your experience, your
 17 reading, your writing, your making presentations, is
 18 smoking a custom?
 19 A. Well, it's a custom, but it's also an
 20 addiction, and many smokers, as I reported this
 21 morning, based on some of our research that we've done,
 22 wished that they would quit. In fact, about 80 percent
 23 of smokers, if you survey them today, regret the
 24 decision to ever smoke to begin with and,
 25 unfortunately, have a difficult time quitting.

1 So, that's hardly a custom. In fact, without
 2 nicotine in the product, I don't think we would have
 3 people smoking the way they do today.
 4 Q. And this letter contains the statement:
 5 Accordingly, our advertising is directed to adult
 6 smokers and not younger people.
 7 Is that what you found in your research?
 8 A. No. That's not what I have found in my
 9 research, and it is not -- much of the advertising, I
 10 will grant, that the industry does is aimed at adults,
 11 but there is a disproportionate share of their ad
 12 spending that is clearly aimed at recruiting new
 13 recruits to replace those who quit and die every year
 14 from smoking.
 15 Q. Now, I had mentioned this letter, which I
 16 believe is in evidence, Plaintiffs' Exhibit 199, from
 17 J.B. Mann, public relations department, to fourth
 18 graders at the Geiger, G-e-i-g-e-r, School, Tacoma,
 19 Washington and, as I say, dated May 1, 1963.
 20 MR. ROSENBLATT: I would offer -- this is
 21 already in evidence.
 22 THE COURT: Yes. It's already in. It should
 23 be marked already.
 24 Okay. Just give it to me.
 25 This is 0199?

1 THE WITNESS: Yes.
 2 BY MR. ROSENBLATT:
 3 Q. So you have the May 1, 1963 letter in front
 4 of you?
 5 A. Yes.
 6 Q. And now, looking at the next to last
 7 paragraph where this letter from the public relations
 8 department of RJ Reynolds says: Despite many years of
 9 extensive research, medical science has been unable to
 10 establish that smoking has a direct causal link with
 11 any human disease.
 12 That was stated in 1963. And was that also
 13 stated in the letter we just went over in 1990?
 14 A. That's correct.
 15 MR. KIRBY: Objection.
 16 BY MR. ROSENBLATT:
 17 Q. Do you think it's responsible --
 18 THE COURT: Wait. Wait. There was an
 19 objection.
 20 MR. ROSENBLATT: I'm sorry.
 21 THE COURT: Overruled.
 22 Go ahead.
 23 BY MR. ROSENBLATT:
 24 Q. Do you think it's responsible for a tobacco
 25 company to be telling fifth graders in 1990 the same

1 thing they were telling fourth graders in 1963, that it
 2 still hasn't been proven?
 3 MR. NEWSOM: Objection, Your Honor. He can't
 4 testify as to what's responsible.
 5 MR. KIRBY: Argumentative, too, Your Honor.
 6 THE COURT: I disagree with you.
 7 Overruled.
 8 A. I think it's wholly irresponsible and
 9 reflects the fact that the RJ Reynolds Tobacco Company
 10 hasn't paid one bit of attention to 22 Surgeon
 11 Generals' Reports that came out between 1964 and 1990,
 12 and clearly they have not changed their opinion in
 13 close to 30 years.
 14 BY MR. ROSENBLATT:
 15 Q. And this 1963 letter of May 1st says, in the
 16 next sentence: We are firmly of the opinion, however,
 17 that definite answers to the many unanswered smoking
 18 and health questions, and the true causes of human
 19 diseases, can be determined only by scientific
 20 research.
 21 And that's what they were saying in 1990; is
 22 that correct? Still need more research?
 23 A. That's correct.
 24 Q. So, in the 27 years between these two
 25 letters, how many scientific reports would you estimate

1 came out in the literature standing for the proposition
 2 that cigarette smoking unequivocally causes cancer and
 3 other diseases?
 4 A. Well, there were tens of thousands of
 5 articles. As I said earlier, that I estimated the
 6 total number of articles at somewhere between 60 and
 7 100,000, but clearly in that period of time, there was
 8 a tremendous amount of research being published on this
 9 issue, and 22 Surgeon Generals' Reports, that were
 10 basically accumulating and then reporting on the
 11 results.
 12 And, of course, the 1964 report, which came
 13 out the year after the 1963 letter, concluded that
 14 cigarette smoking was a cause of lung cancer.
 15 Q. And, Dr. Cummings, I want to show you another
 16 letter from RJ Reynolds Tobacco Company from T.K.
 17 Cahill of the public relations department to
 18 Mr. Kenneth Bersinger, fifth grade, Room 404, Will
 19 Rogers Elementary School in Santa Monica, California,
 20 dated April 4, 1972.
 21 This is Engle Plaintiffs' Exhibit 200.
 22 THE COURT: Previously marked?
 23 MR. ROSENBLATT: I'm not sure if this one has
 24 been previously marked, Judge. Another one from Cahill
 25 dated June 6, 1972 was previously marked.

1 THE COURT: I don't have this one on my list,
 2 but it may be on the master one.
 3 MR. NEWSOM: It's not been admitted.
 4 THE COURT: Not in, yet?
 5 THE CLERK: I don't see it, Your Honor.
 6 THE COURT: Okay. Then mark it for I.D.
 7 MR. ROSENBLATT: Yes.
 8 (Plaintiffs' Exhibit 200 was marked for
 9 identification.)
 10 BY MR. ROSENBLATT:
 11 Q. So you have got that letter in front of you
 12 of April 7, 1972 to the fifth graders in Santa Monica?
 13 A. Yes.
 14 Q. The third paragraph: Long before the present
 15 criticism began, the tobacco industry, in a sincere
 16 attempt to determine the harmful effects, if any,
 17 smoking might have on human health, established the
 18 Council for Tobacco Research.
 19 Based on your research relative to the
 20 Council for Tobacco Research, how effective has that
 21 council been in answering and determining the question
 22 as to whether or not cigarette smoking causes cancer
 23 and other diseases?
 24 A. Well, it's funded a lot of grant projects,
 25 including some even at Roswell Park Cancer Institute,

1 but, as I pointed out earlier, most of these grant
2 projects -- in fact, the vast majority, have had
3 nothing to do with smoking and health whatsoever. And,
4 so, my opinion is that the Council for Tobacco Research
5 contributed very little to getting the facts about
6 smoking and health, as they had claimed is part of
7 their mission when they were created in 1954.

8 Q. Does Roswell Park Cancer Institute accept
9 funding from the Council for Tobacco Research?

10 MR. MOODHE: Objection.

11 A. No, we --

12 THE COURT: Objection?

13 MR. MOODHE: Yes.

14 THE COURT: Overruled.

15 A. No.

16 BY MR. ROSENBLATT:

17 Q. Does the M.D. Anderson Cancer Institute in
18 Houston, Texas accept funding from the Council for
19 Tobacco Research institute?

20 THE COURT: Only if you know.

21 MR. MOODHE: Objection.

22 A. I know they don't. M.D. Anderson and Harvard
23 have all stopped taking money from the Council for
24 Tobacco Research.

25 BY MR. ROSENBLATT:

1 Q. And if you -- if you look at the next to last
2 paragraph of the letter of April 7, 1972, to the fifth
3 graders in Santa Monica, the letter says, quote:
4 Despite all of the research going on, medical science
5 has not found any conclusive evidence that an element
6 in tobacco or tobacco smoke causes any human disease.

7 Is that statement true or false?

8 A. In 1972, this statement would be false.

9 Q. The answers to the many unanswered smoking
10 and health questions -- and the true causes of human
11 diseases -- can, we believe, be determined by scientific
12 research. Our company intends, therefore, to continue
13 to support such research until the truth is known.

14 Now, according to the letter that we looked
15 at to the fifth graders at the school that you spoke,
16 according to RJ Reynolds, was the truth still
17 uncertain?

18 A. It apparently is still uncertain, to the RJ
19 Reynolds Tobacco Company. Not to the rest of us.

20 Q. Now, Engle Plaintiffs' Exhibit Number 112,
21 which has been admitted into evidence --

22 THE COURT: Before we get there, let me have
23 200 marked as an exhibit in evidence.

24 (Plaintiffs' Exhibit 200 was admitted into
25 evidence.)

1 THE COURT: And you have 212?

2 You say 212 is in?

3 MR. ROSENBLATT: This is 112, Judge.

4 THE COURT: 112.

5 MR. ROSENBLATT: Plaintiffs' Exhibit 112

6 dated June 6, 1972 to Mrs. Sherry Fine, a school in --
7 the Bateman School in Chicago, Illinois, and this is
8 addressed to second graders.

9 THE COURT: Do you have a copy of that?

10 Do you have a copy for him?

11 THE CLERK: It's already in evidence.

12 THE COURT: It's already in evidence.

13 BY MR. ROSENBLATT:

14 Q. Read the next to last paragraph of that
15 letter.

16 A. Despite all of the research going on, medical
17 science has not found any conclusive evidence that an
18 element in tobacco or tobacco smoke causes any human
19 disease. The answers to the many unanswered smoking
20 and health questions and the true causes of human
21 diseases can, we believe, be determined by scientific
22 research. Our company intends, therefore, to continue
23 to support such research until the truth is known.

24 Q. Now, I've shown you a series of letters, May
25 1, 1963; April 7, 1972; June 6, 1972; and January 11,

1 1990. And in those 27 years, as you look at those four
2 letters addressed to school children, second grade,
3 fourth grade, fifth grade, has the substance of those
4 letters from 1963 to 1990 changed in any way on the
5 issue of smoking and health?

6 A. No.

7 Q. And the conclusions in any of those letters,
8 in terms of, we still don't have all of the answers,
9 more research is needed, are those assertions by RJ
10 Reynolds Tobacco Company true or false?

11 A. I believe they're false.

12 Q. Now, do you know why there are 20 -- although
13 there are, what did you say, 300 brands?

14 A. It's over 300 brands currently.

15 Q. Okay. And do you -- has your research
16 indicated to you why one thing is uniform about all of
17 the packages, they all have 20 cigarettes in them?

18 Why is that?

19 A. Well, I believe it's because it's a day's
20 supply of nicotine for the average smoker. It's sort
21 of akin to how many Pringles they put in a Pringles box
22 or can, there's a lot of research that goes on to how
23 many cigarettes you're going to put in a pack. And the
24 documents that I've seen from the industry -- actually
25 one of the documents talks about --

1 MR. NEWSOM: Your Honor --
 2 A. -- cigarettes pack --
 3 MR. NEWSOM: Your Honor, he's talking about
 4 specific documents.
 5 MR. ROSENBLATT: He's not naming any
 6 documents.
 7 THE COURT: He didn't name any documents,
 8 specific documents.
 9 Without getting into a document, unless you
 10 have a copy of it with you, talk about what you found
 11 out from your research, based on what you know.
 12 A. Basically, what I know from my research is
 13 that the cigarette pack represents a day's supply of
 14 nicotine for the typical smoker who consumes, roughly,
 15 a package of cigarettes per day. And the cigarette
 16 represents the delivery device for the nicotine.
 17 BY MR. ROSENBLATT:
 18 Q. Now, Dr. Cummings, when you were going
 19 through the slides, you indicated that if a person were
 20 just to take some tobacco leaf from the field and stick
 21 it in paper and start smoking it, that the amount of
 22 nicotine would vary greatly, based on what was in the
 23 leaf?
 24 A. That's right. In fact, there's -- there are
 25 articles in the research literature that talk about

1 roll your own cigarettes and the difficulty of
 2 measuring the tar and nicotine content, because it's
 3 not uniform in the measurement from one cigarette to
 4 the next because you're basically getting chopped up
 5 tobacco in that case and rolling it in a piece of
 6 paper.
 7 Q. Now, whether -- whether I show you a package
 8 of Camel or a package of Kool or a package of Marlboro,
 9 based on your research, is the precise amount of
 10 nicotine the same, for example, in all 20 of the
 11 cigarettes that would be in a Marlboro package?
 12 A. Yes.
 13 Q. And the same thing with Kool and Camel?
 14 A. Yes.
 15 Q. How is the tobacco industry -- how is their
 16 technology able to accomplish that?
 17 A. They accomplish it through a number of means,
 18 blending of tobaccos, the use of reconstituted tobacco,
 19 as I mentioned this morning, the accelerants that are
 20 on the paper. There are a number of means that they
 21 use to control the amount of nicotine that the smoker
 22 is going to get, including the paper and the porosity
 23 of the paper, the holes that they put in the paper and
 24 vent holes that they laser into the filter, the filter
 25 material, the density of the fibers.

1 It is actually a very complex, scientific
 2 process to guarantee the precise amount of nicotine,
 3 and cigarette companies are very good at it.
 4 Q. They have the technology to do that?
 5 A. Yes, they do.
 6 Q. Have you done any research on smoking in the
 7 military?
 8 A. I've studied, you know, advertising on
 9 smoking in the military, and I've also reviewed surveys
 10 on smoking in the military.
 11 Q. And the surveys demonstrate what?
 12 A. There was a very high rate of smoking among
 13 people entering in the military in this country, and,
 14 historically, the military has often been a place where
 15 people got started smoking, with the presence of free
 16 cigarettes in their K-rations and C-rations.
 17 Q. What is it -- what does it cost the tobacco
 18 industry to produce a pack of cigarettes?
 19 A. Well --
 20 MR. HEIM: Objection, Your Honor, unless this
 21 witness has expertise on cost of production.
 22 THE COURT: Well, if he's studied it and
 23 found out.
 24 BY MR. ROSENBLATT:
 25 Q. Is this something you've studied?

1 A. Yes, it is.
 2 It works out to roughly a quarter of a penny
 3 per stick or about a nickel a pack.
 4 Q. How much does the tobacco industry spend on
 5 advertising and promotion in a given year?
 6 A. They spent over five billion last year.
 7 Q. That's collectively, all of the major
 8 companies?
 9 A. All of the major companies. They're required
 10 to report on their total advertising expenditures by
 11 various categories to the Federal Trade Commission.
 12 Q. And that's five billion with a "b"?
 13 A. With a "b."
 14 Q. As opposed to million.
 15 Now, prior to the time that any warnings were
 16 required to be put on packages of cigarettes by the
 17 Federal Government, going back to the 1940s, the 1950s,
 18 the 1960s, what information, based on your research and
 19 your study of tobacco industry documents, did the
 20 tobacco companies have as to the issue of causation,
 21 cigarette smoking causing --
 22 MR. NEWSOM: Your Honor, I think you -- I
 23 don't believe he can state what information the tobacco
 24 companies --
 25 MR. HEIM: Can we approach?

Page 16437	Page 16439
<p>1 THE COURT: Let's talk about it at sidebar. 2 A lot of things you don't believe sometimes. 3 (The following proceedings were had at 4 sidebar:) 5 THE COURT: We're talking about prior to '69; 6 right? 7 MR. ROSENBLATT: Right. 8 THE COURT: And the question basically is, 9 what information, based on your research and study, did 10 the tobacco companies have? 11 MR. NEWSOM: It's not been established. 12 THE COURT: This would be based on something 13 that either the tobacco companies produced, published 14 or told him or he came in contact with. 15 No, he can't testify as to what they knew, I 16 mean, something to base it on. 17 MR. NEWSOM: That's the word -- 18 THE COURT: So, if -- 19 MR. HEIM: What's the question? 20 THE COURT: The question is, based on your 21 research and your study, did the tobacco companies 22 have -- I guess it's what did they have as to the issue 23 of causation of cigarette smoking. 24 So, what do you expect him to talk about? 25 MR. ROSENBLATT: That they had enough</p>	<p>1 review of -- some incomplete review of industry 2 documents that likely contains privileged material, 3 that's -- it's -- it's an improper -- inappropriate 4 foundation to answer a question like this. 5 Now, if he is -- if the question is, in your 6 opinion, was there information that was out there in 7 the public from which the tobacco companies should have 8 drawn a conclusion, that's a different question, but 9 not based on his partial review of company documents, 10 which is hard to know what it is that he's talking 11 about. 12 THE COURT: There must be a hundred thousand 13 company documents prior to 1970 that's out there. I 14 mean, nobody can list all of them. Can't say that he 15 never saw any of them. 16 If he saw all of the documents and all of the 17 references made in the Surgeon Generals' Reports in 18 '64 -- well, there's so much material for anybody who 19 sits there and reads it and studies it, you've got to 20 come up with some sort of a conclusion, right or wrong 21 conclusion, but they got to come up with a conclusion. 22 MR. NEWSOM: He could testify about his 23 conclusion with the same information that was available 24 to the tobacco companies if he wants to. 25 THE COURT: In his opinion, this is</p>
Page 16438	Page 16440
<p>1 information where they should have warned. 2 THE COURT: How does he know that? 3 MR. ROSENBLATT: Based on his review of 4 tobacco companies over the years. 5 THE COURT: Of the tobacco? 6 MR. ROSENBLATT: And based on the information 7 that was out there and the science which he knows that 8 the tobacco research monitored. So they had their 9 own -- they had their own information, and then the 10 information that was out there. 11 THE COURT: Okay. 12 MR. MOODHE: Mr. Rosenblatt just said that 13 they should have warned. That's preempted. 14 THE COURT: No, it isn't. Not prior to '69. 15 MR. HEIM: He's asking prior to '69. He's 16 asking prior to 1969. I have a different objection to 17 this, but he may have taken care of it with his 18 response. 19 My objection to this was one -- the first 20 thing this morning we heard was that this man was not 21 going to be a causation witness. Suddenly he's turning 22 into a causation witness, which we were expressly told 23 he wasn't. 24 And, second, he's testifying it seemed to be 25 until counsel said what he just said, based on some</p>	<p>1 information, that if I knew it, they knew it. 2 MR. NEWSOM: That's fine. 3 THE COURT: So that's what he's talking 4 about. It's out there. It's out there. 5 (The sidebar conference was concluded, and 6 the following proceedings were held in open court:) 7 BY MR. ROSENBLATT: 8 Q. Dr. Cummings, based on the information that 9 was out there in the public scientific literature, 10 based on your review of tobacco industry documents, 11 from 1969 and before, what -- 12 MR. NEWSOM: Your Honor, I thought we just 13 agreed -- 14 THE COURT: Well, I didn't say that at all. 15 You misunderstood me. 16 BY MR. ROSENBLATT: 17 Q. What, in your opinion, was the state of the 18 knowledge in 1969 on the issue of whether cigarette 19 smoking causes cancer and other diseases? 20 A. The state of the knowledge in 1969 was 21 extensive, and the vast majority of the scientific 22 community had concluded that smoking was related to 23 lung cancer, heart disease, emphysema, that smoking 24 was, in fact, addictive, and nicotine was the drug in 25 cigarettes that caused people to be dependent on them.</p>

1 Q. To your knowledge, prior to the time that
2 warnings were mandated and were required by the
3 Congress of the United States, that tobacco companies
4 put certain warnings on their packages of cigarettes,
5 did any tobacco company in this country ever
6 voluntarily warn of health consequences to their
7 consumers?
8 A. Not that I'm aware of.
9 MR. ROSENBLATT: Your Honor, I would want to
10 at some point move in evidence the 1989 Surgeon General
11 Report and the 1994 Surgeon General's Report that
12 Dr. Cummings directly contributed to.
13 THE COURT: I thought they were admitted.
14 MR. ROSENBLATT: I don't have to do that
15 right now, but before I --
16 THE COURT: I thought they already were. I'm
17 not sure what the numbers are.
18 MR. NEWSOM: They're not, Your Honor.
19 THE COURT: They're not.
20 MR. ROSENBLATT: I don't think they were
21 formally admitted as yet.
22 MR. NEWSOM: We have an objection.
23 MR. HEIM: We can deal with that later, Your
24 Honor, in terms of their admissibility.
25 THE COURT: All right.

1 MR. ROSENBLATT: I mean, that would be all
2 right with me, Judge, because I don't intend to read
3 from them.
4 THE COURT: If you don't need them right now.
5 MR. ROSENBLATT: Exactly.
6 THE COURT: Okay. Do you have a number,
7 meanwhile?
8 MR. ROSENBLATT: I don't.
9 THE COURT: We'll get it later.
10 MR. ROSENBLATT: 1989 and 1994.
11 THE COURT: Okay. 1994, you say. '89 and
12 '94.
13 MR. ROSENBLATT: '89 and '94."
14 THE COURT: Okay. We'll get it. All right.
15 BY MR. ROSENBLATT:
16 Q. The letter that we read from, the 1990 letter
17 to the fifth graders at the school where you spoke, and
18 in one of your slides you showed all of the CEOs of all
19 of the major tobacco companies appearing before
20 Congress, was the testimony of the CEOs before Congress
21 consistent with the statements made in the 1990 letter
22 from the public relations department of RJ Reynolds to
23 the fifth graders about causation --
24 MR. HEIM: Objection, Your Honor.
25 Q. -- and about addiction and about the need for

1 more research?
2 MR. HEIM: Objection.
3 THE COURT: There is an objection on the
4 floor. I guess we will have to talk about that, folks.
5 (The following proceedings were had at
6 sidebar:)
7 MR. ROSENBLATT: I was referring to the 1990
8 letter.
9 THE COURT: 1990.
10 MR. ROSENBLATT: Yes.
11 MR. HEIM: Ask Bill for it.
12 THE COURT: Bill, the 1990 letter, which we
13 had admitted a while ago -- Okay. Thank you.
14 MR. HEIM: Fine.
15 THE COURT: It's 163. Okay.
16 Now, I guess we're going to have to break
17 this down as to what we're talking about.
18 MR. ROSENBLATT: I can read it.
19 MR. ROSS: Your Honor, my objection is there
20 is absolutely no need for expert testimony to this jury
21 on whether or not this letter or somebody else's
22 statement are consistent. The letter speaks for
23 itself. Someone else's statement speaks for itself.
24 That is the province of the jury. Much of what this
25 witness is doing is making closing argument,

1 There is no expert or scientific testimony
2 necessary for somebody to say, did he say the same
3 thing here and the same thing there.
4 Secondly, this letter has nothing do with my
5 client. He wants to compare a letter from RJR to what
6 my client said before Congress.
7 MR. NEWSOM: And it doesn't mention --
8 THE COURT: We don't know what it was that
9 the executive said.
10 MR. ROSS: Right. That's not in evidence.
11 MR. NEWSOM: It doesn't mention addiction
12 either.
13 MR. ROSENBLATT: They all say this, all of
14 the tobacco companies.
15 THE COURT: I don't know if they did or
16 didn't, which is the next problem.
17 MR. ROSENBLATT: That's what they all said
18 before Congress.
19 MR. HEIM: They all said what?
20 MR. ROSENBLATT: That this is a party line.
21 MR. HEIM: Well, I --
22 MR. ROSS: If that were true, which it's not
23 in evidence, there's no need for an expert to testify
24 about that.
25 MR. HEIM: But I don't know that it's true.

1 THE COURT: Here's the problem. I don't
2 think the jury knows, and I don't think I know what it
3 was that they did say in front of Congress. So to say
4 at this point that whatever it was they said does not
5 comport with that, you're still left with what it was
6 they said. And if it's true what they did say and
7 everybody knows what they said, then he's right, then
8 the jury can make its own decision.
9 So I'll sustain the objection.
10 MR. ROSS: Thank you.
11 (The sidebar conference was concluded, and
12 the following proceedings were held in open court:)
13 THE COURT: All right, sir.
14 BY MR. ROSENBLATT:
15 Q. Okay. Dr. Cummings, in terms of your
16 research and your work at Roswell Park and your work
17 throughout your career, in terms of your research and
18 your writing and your interaction with colleagues and
19 your presentations, has it been part of your work to
20 follow the tobacco industry's response through the
21 Tobacco Institute and others; for example, when a
22 Surgeon General's Report is published, and when other
23 scientific papers are published, appearing in the
24 Journal of the American Medical Association, the New
25 England Journal of Medicine, which take the position,

1 very forcefully, that cigarette smoking causes cancer
2 and other diseases?
3 A. I have had a lot of experience with that.
4 I've debated on a number of occasions representatives
5 from the Tobacco Institute and other organizations
6 funded by the tobacco industry.
7 So, I have followed very carefully the
8 arguments and some of the documents that they've put
9 out over the years, actually spanning years. And with
10 the documents that have been available on the Internet,
11 we have, in fact, collected many of those documents to
12 see what their statements were historically, over time.
13 Q. Does the tobacco industry have a fairly
14 standard response to Surgeon Generals' Reports and
15 scientific data which indict their product?
16 A. Yes. Basically their response is, the
17 evidence is not there, and we need more research to
18 show it.
19 Q. Needed more research in 1954, and they need
20 more research in 1998; is that their position?
21 A. Well, I haven't seen anything from 1998, but
22 the most recent stuff I've seen and certainly the
23 testimony in front of Congress was that the evidence
24 was still not clear.
25 MR. HEIM: Objection, Your Honor.

1 MR. ROSENBLATT: Thank you, Dr. Cummings.
2 THE COURT: Overruled.
3 Okay. Cross?
4 MR. NEWSOM: May we -- can we take a brief
5 recess before we start cross?
6 THE COURT: It's not really necessary, not
7 unless you folks want one.
8 THE JURY PANEL: (Responded negatively.)
9 THE COURT: They're raring to go.
10 MR. NEWSOM: Your Honor, there will be others
11 who will also do cross today, Mr. Kirby and Mr. Moodhe.
12 CROSS-EXAMINATION
13 BY MR. NEWSOM:
14 Q. Now, Dr. Cummings, you said that you're the
15 head of the Smoking Control Program at Roswell Park; is
16 that right?
17 A. Yes. I'm also the director of the department
18 of cancer prevention, epidemiology and biostatistics,
19 and the Tobacco Control Program is a unit within that
20 group.
21 Q. In your role as the head of the Smoking
22 Control Program, did you say that you're involved in
23 efforts discouraging the use of tobacco?
24 A. That's correct.
25 Q. Now, if we use the term tobacco control

1 advocate to describe a role in discouraging the use of
2 tobacco, would you describe yourself as a tobacco
3 control advocate?
4 A. I certainly discourage people from using
5 tobacco. So, in your definition, it would apply, yes.
6 Q. And you considered yourself as part of the
7 war on tobacco?
8 A. Well, I'm not sure about any wars. I haven't
9 gotten any guns out or anything of that nature.
10 I wrote an article called -- involving older
11 Americans in the war on tobacco --
12 Q. Dr. Cummings, if you would just answer the
13 question, please.
14 THE COURT: Just a minute.
15 MR. ROSENBLATT: Well, excuse me. He was
16 answering it.
17 THE COURT: Whoa, whoa, whoa. He was
18 answering the question. You interrupted him. He was
19 dead on point.
20 MR. NEWSOM: All right.
21 THE COURT: Go ahead, sir.
22 A. So I wrote an article with that in the title.
23 Basically I work in a cancer institute, and
24 because smoking is a major cause of cancer, and since
25 my department is involved in efforts to prevent cancer,

1 in fact, it's part of the mission of our institute, I
 2 am involved in any effort I can be in to discourage the
 3 use of tobacco.
 4 We involve kids. We involve smokers. We
 5 provide services to smokers. We work with our patients
 6 at Roswell Park.
 7 BY MR. NEWSOM:
 8 Q. So you do agree you're part of the war on
 9 tobacco?
 10 A. Sure. In that regard, I guess.
 11 Q. And you're an advocate of greater regulation
 12 of the sale of tobacco products?
 13 A. Absolutely.
 14 Q. And you're an advocate of greater regulation
 15 of tobacco advertising and marketing?
 16 A. Yes.
 17 Q. And as part of your tobacco control
 18 activities, you've lobbied government officials on
 19 smoking issues; haven't you?
 20 A. Well, what do you mean by lobby?
 21 Q. Make presentations to government officials.
 22 A. I've sent things to government officials,
 23 yes.
 24 Q. Tried to influence legislation on tobacco?
 25 A. I've been asked to provide testimony on a

1 number of occasions, on a variety of issues, to
 2 government officials, and I've done that.
 3 Q. And you've given presentations to groups and
 4 offered them guidelines on how to lobby on smoking
 5 issues; isn't that right?
 6 A. Well, I don't really lobby. I educate.
 7 Q. And, Dr. Cummings, you've gone around the
 8 country and you've made presentations and slide shows
 9 that advocate tobacco control; haven't you?
 10 A. I've gone around to --
 11 Q. Any groups that you speak to, and advocated
 12 tobacco control?
 13 A. I advocate not smoking, sure.
 14 Q. And tobacco control?
 15 A. Yes.
 16 Q. And you're a member of several organizations
 17 that could be considered anti-tobacco or anti-smoking;
 18 is that right?
 19 A. You know, pro-smoker, actually. I actually
 20 don't like the label anti-smoker, because we actually
 21 offer advice to smokers. Most smokers want to quit, so
 22 we actually help them to accomplish what they want.
 23 And so we're pro-health.
 24 Q. But at least you're involved with a number of
 25 organization that are involved in tobacco control

1 activities?
 2 A. I'm involved with a large number of
 3 organizations in public health and medicine. Many of
 4 them have taken a strong stance on tobacco.
 5 Q. That is, they're involved in tobacco control
 6 activities?
 7 A. Yes.
 8 Q. And one of those organizations would be Stop
 9 Teenage Addiction to Tobacco or STAT?
 10 A. That's correct.
 11 Q. Are Dr. Cahan and Dr. Ronald Davis also
 12 members of that group?
 13 A. I believe they are.
 14 Q. And a member of the Commission for a
 15 Healthier New York?
 16 A. That's correct. That's an advisory group to
 17 the health commissioner in New York State. I was
 18 appointed to that group, and it advises the health
 19 department about the policies and programs that they
 20 should provide.
 21 Q. And that group is involved in tobacco control
 22 activities?
 23 A. Yes.
 24 Q. And you're a member of Doctors Ought to Care?
 25 A. Yes.

1 Q. And that's a tobacco control organization?
 2 A. It's a pro-health organization, largely
 3 involved with educating consumers, particularly young
 4 people, about a range of things, including tobacco.
 5 Q. And Dr. Blum and Dr. Joseph Davis and
 6 Dr. Ronald Davis and Dr. Solberg, who are also going to
 7 be witnesses in this case, are members of Doctors Ought
 8 to Care?
 9 A. Yes.
 10 Q. And you support the organizations of a
 11 group -- I'm sorry.
 12 You support the goals of a group called
 13 Action on Smoking and Health, which is a tobacco
 14 control organization?
 15 A. Yes. Support means that I subscribe to their
 16 newsletters. It's got some interesting information.
 17 So, that's the amount of support. I think it's a \$35
 18 donation a year to get their newsletters.
 19 Q. But you support their goals, too?
 20 A. Yes, I do.
 21 Q. And you're a member of the Coalition for a
 22 Tobacco-Free Erie County?
 23 A. Yes.
 24 Q. And that's another tobacco control
 25 organization?

1 carcinogenesis and worked with the people who had
2 expertise there and understand it, so I have more than
3 a layman's understanding of carcinogenesis being at a
4 cancer hospital for 18 years.

5 Q. You're not an oncologist?

6 A. No, I'm not.

7 Q. An oncologist is somebody who treats cancer?

8 A. That's right.

9 Q. You're not a toxicologist?

10 A. No.

11 Q. Now, your undergraduate education, as you
12 said, your Bachelor's degree qualified you to be a
13 health teacher in secondary school, to teach physical
14 education?

15 A. That's right.

16 Q. And then you got a -- let me back up.

17 You don't have a Ph.D or a Master's degree in
18 biostatistics, do you?

19 A. No. Although I have extensive background in
20 statistics and, in fact, have been teaching graduate
21 level courses in epidemiology that involves statistics
22 in the last 18 years.

23 Q. In any event, you don't have a Ph.D or
24 Master's in biostatistics or any kind of statistics?

25 A. No. I don't have an official degree labeled

1 statistics.

2 Q. And you don't have a Ph.D or Master's degree
3 in epidemiology; do you?

4 A. No. As I mentioned, I've been teaching the
5 research course in epidemiology methods for the last 18
6 years at Roswell Park Cancer Institute, who are
7 graduate students that train some of the -- and they
8 get degrees in epidemiology.

9 Q. And in fact, your degree is in, as you say,
10 health education and health behavior?

11 A. It is in health education and health
12 behavior. It's exactly what the degree is, which is a
13 program in the School of Public Health, basically
14 focused on consumer behavior related to health issues.

15 Q. And it involves why people behave the way
16 they do with regard to their health and consistently
17 modifying the lives for better health and things of
18 that sort?

19 A. That's right.

20 Q. And back to epidemiology, you're not
21 certified as an epidemiologist by the American College
22 of Epidemiology; are you?

23 A. No, I'm not.

24 Q. And you're not a fellow of the American
25 College of Epidemiology?

1 A. No. People who work for me in my department
2 are.

3 Q. But you're not?

4 A. I'm not.

5 Q. Now, you've mentioned earlier the cellulose
6 acetate filters, and you mentioned a study, and that
7 study was done by John Pauly and his colleagues?

8 A. Yes. I'm one of those colleagues. I was
9 coinvestigator on the NIH grant with Dr. Pauly, funded
10 that research.

11 Q. And part of that research you needed to use
12 special microscopes and some special laboratory
13 techniques; is that right?

14 A. That's right. Dr. Pauly has his own lab at
15 Roswell Park.

16 Q. It was Dr. Pauly that did that work and not
17 you?

18 A. His students who were hired on our grant.

19 Q. But not you?

20 A. I worked with him on the -- worked very
21 closely with him on the studies.

22 Q. But you're not trained as a microscopist, is
23 that right?

24 A. That's right.

25 Q. You're not trained to study human lung

1 tissue; are you?

2 A. No, I'm not.

3 Q. So it's somebody else that looked at those
4 things?

5 A. That's correct.

6 Q. As we established before, you're not a
7 medical doctor, you're not a toxicologist?

8 MR. ROSENBLATT: Repetitious, Judge.

9 THE COURT: Yes. Sustained.

10 BY MR. NEWSOM:

11 Q. You're not an expert in any sort of
12 laboratory sciences; are you?

13 A. What sciences are you referring to?

14 Q. Are you an expert in some kind of laboratory
15 sciences?

16 A. Well, it depends on what you're referring to.
17 I mean, a lot of behavioral science is done in a
18 laboratory.

19 Q. Laboratory science is evaluating lung tissue
20 through microscopes and that sort of thing.

21 A. No, I don't do that.

22 Q. You're not an expert in chemistry?

23 A. No.

24 Q. You're not an expert in microbiology?

25 A. No.

1 Q. And you've never designed a cigarette; have
2 you?
3 A. No, I haven't.
4 Q. Never designed a cigarette filter?
5 A. No.
6 Q. You don't claim to have any expertise in
7 cigarette design?
8 A. Oh, I beg to differ. I think I have more
9 than a layman's understanding of cigarette design, as
10 evidenced by the fact that RJ Reynolds Tobacco Company
11 invited me down to learn more about their Eclipse
12 product. We had already written up an article on
13 Eclipse. I've written several articles on cigarette
14 design.
15 Q. Sticking with the cellulose acetate filters,
16 Doctor, the bottom line is that you can't say -- you
17 don't know that the loose filter fibers are causally
18 related to any human disease; is that right?
19 A. That's right. We've implanted the fibers
20 into the bellies of laboratory animals to see what
21 effect -- you get an immunologic effect -- part of the
22 purpose of doing that would be to see whether the
23 fibers would still be there, whether they would
24 biodegrade. And, in fact, they're still there, intact.
25 The surrounding cell -- cells attached to the

1 fibers, the immunologic response that I referred to
2 earlier this morning. But in terms of human disease,
3 no, we haven't been able to show -- I'm not sure how we
4 would.
5 There certainly is evidence that the nature
6 of lung cancer has changed dramatically over the last
7 30 years in terms of the histologic types of lung
8 cancer, and the filtered cigarette is one of the bases
9 for that. More adenocarcinoma than squamous cell
10 carcinoma.
11 Q. You wouldn't even know how to do the
12 experiment to try to show that; would you?
13 A. Well, I mean, you could do a large,
14 randomized clinical trial with humans, but I don't
15 think it would be ethical to do so. So I could design
16 such a study, but I don't think it would be ethical to
17 execute it.
18 Q. Now, turning to another topic, during your
19 direct examination, we discussed marketing to young
20 people; is that right?
21 A. Right.
22 Q. Now, you don't have any formal training in
23 marketing; do you?
24 A. Well, the study of health behavior, it's the
25 study of consumer behavior related to health. So, I

1 focus very naturally on things that are related to
2 health. Particularly my research and expertise has
3 been in the area of, you know, smoking and tobacco use
4 behaviors, particularly among young people. That's why
5 I've been identified as a witness in so many of these
6 cases.
7 Q. Well, let's try again.
8 You don't have any formal training in
9 marketing; do you?
10 A. Well, the training I have, the formal
11 training that I have is in consumer behavior related to
12 health. And that involves marketing. It's a form of
13 marketing.
14 I don't have a marketing degree to sell
15 Pringles, for example, or consumer products for sale.
16 Q. And you don't have any formal training in
17 advertising; do you?
18 A. Well, other than looking at the effects of
19 advertising on individuals with regards to their
20 health.
21 I mean, it falls into the area of my
22 expertise in health behavior, but I don't have a degree
23 in advertising. I didn't go to a business school and
24 get a degree in advertising.
25 Q. Well, Doctor, do you remember when your

1 deposition was taken in the State of Washington case on
2 May 12th of this year?
3 A. Not really.
4 Q. Do you remember your deposition being taken
5 in the Washington case?
6 A. Oh, sure do.
7 Q. Just let me ask you if these questions were
8 asked and you gave these answers:
9 But you don't have any formal training in
10 marketing, if I remember from reading your prior
11 deposition testimony; correct?
12 Yes.
13 And then another question: And you don't
14 have any formal training in advertising; correct?
15 I don't have any formal training in
16 advertising, was your answer.
17 Were those questions asked and those answers
18 given?
19 A. Right. I believe I expanded following those
20 questions about what I've just told you about, which
21 is, I've done design marketing campaigns on health, to
22 communicate to the public in Buffalo about the hazards
23 of smoking. I've done studies on a TV campaign having
24 to do with the health effects of secondary smoke on
25 mothers and the effects on their kids and evaluated

1 correct?

2 A. That's right.

3 MR. MOODHE: Your Honor, I would offer the
4 report in evidence as Defendants' Exhibit 1650.

5 THE COURT: 1650 for identification.

6 MR. MOODHE: And move for its admission.

7 THE COURT: Okay. Would you mark it, please,
8 sir?

9 (Defendants' Exhibit 1650 was marked for
10 identification.)

11 MR. ROSENBLATT: Well, we would object to it
12 being admitted on our case. I don't care --

13 THE COURT: No. He didn't ask for it being
14 admitted yet. It's just for identification.

15 You'll get a chance to admit it on your side
16 of the case.

17 MR. ROSENBLATT: That's fine.

18 MR. MOODHE: That's fine, Your Honor.

19 BY MR. MOODHE:

20 Q. Now, Dr. Cummings, as I understand your view
21 on CTR and its work, am I correct in understanding that
22 you believe that sometime around the late 1960s, 1970
23 or so, CTR reoriented its research program into areas
24 that were less pertinent to smoking and health than it
25 was looking at prior to that period of time?

1 A. I have stated that opinion before. However,
2 one of the reasons we did this recent study to look at
3 the titles was to actually try to gather information to
4 look at that. And to some extent, there were more
5 studies that came up with key words with smoking or
6 tobacco in the earlier period.

7 In fact, I believe the '57 report, 20 percent
8 of the grants that were funded, the titles of the
9 grants contained those key words, whereas the most
10 recent report that we looked at, and I believe that was
11 1990, I'm not sure exactly, I'd have to go check my
12 notes, but it was a fairly recent report from the
13 Council and it had less than two percent of their
14 grants having those words in the titles.

15 So, I have stated that I thought my opinion
16 was just glancing, having glanced at the abstracts, it
17 looked like there were fewer studies in the recent
18 period dealing with smoking and health than had
19 occurred, and there seemed to be a shift.

20 But that was an opinion that I had stated in
21 testimony I believe I gave in deposition in the prior
22 case.

23 Q. Okay. Just so we can get the jury a feel for
24 what's in this report, the report includes the name of
25 the investigator, the title of the report that was

1 published, where it was published, in what medical
2 journal, the scientific journal, and a brief abstract
3 that summarizes the major conclusions of the report; is
4 that correct?

5 A. That's correct.

6 Q. Now, Doctor, just to elaborate a little more,
7 these are titles that were taken from various CTR
8 annual reports.

9 Under your analysis, as I understand it, none
10 of these reported projects would qualify as relevant to
11 the investigation of cigarette smoking and its health
12 consequences, because they don't contain the word
13 tobacco or cigarette smoking or anything like that;
14 correct?

15 A. Well, I mean, clearly these titles don't
16 include the word tobacco, cigarette smoking, and,
17 therefore, they wouldn't show up as having those words
18 in the title, and that's all I said; that we had done
19 this analysis -- I mean, the best way to find out,
20 quite frankly, is to ask the scientists themselves
21 whether they believe that the work they've done has
22 anything to do with smoking, which is what we did in
23 our survey of the 1989 CTR grant recipients, and which
24 we found that out of the grant recipients --

25 Q. Dr. Cummings, we'll get to the survey.

1 MR. ROSENBLATT: Well, let him finish his
2 answer.

3 THE COURT: Well, it's a little bit offline
4 on it.

5 All right. You can go back on redirect and
6 ask him that, if you wish to.

7 BY MR. MOODHE:

8 Q. Just talking about your analysis of the
9 titles, am I correct in understanding that, when you're
10 talking about the 20 percent or the two percent --

11 A. Yes.

12 Q. -- these titles would not fall into that
13 percentage?

14 A. That's correct. That's right.

15 Q. Would you also agree with me that this type
16 of research work is what scientists generally call
17 basic research?

18 A. It's research. I'm not sure how basic it is.

19 I mean, the basic research -- I mean, if
20 you're talking about laboratory research or whatever,
21 it's probably more laboratory-oriented than
22 population-oriented research.

23 Q. Okay.

24 A. I consider some of the work that I do basic,
25 but my research is often done in populations or

1 communities.

2 Q. But things like work with genetics,
3 immunological systems, biochemistries, cell biology,
4 that's also encompassed in the term basic research;
5 right?

6 A. Yes.

7 Q. Okay. Now, I'd like to show you what I think
8 you will confirm is a blow-up of the table of contents
9 from the 1989 CTR Annual Report.

10 Okay. And you see that the abstracts of the
11 reports are organized under six topical headings:
12 Cancer-related studies, the respiratory system, heart
13 and circulation, neuropharmacology and physiology,
14 pharmacology, biochemistry and cell biology, immunology
15 and adaptive mechanisms; correct?

16 A. That's correct.

17 Q. And this type of research is the sort of
18 basic research we were talking about a moment ago?

19 A. Well, there is a table of contents that list
20 the categories of which there are headings of the
21 abstracts. So, some of the abstracts are placed in the
22 category under cancer-related studies and respiratory
23 system studies.

24 I would have anticipated, given the stated
25 mission of the CTR, to fund work on cancer studies --

1 well, what work have they done on smoking and health
2 and smoking and cancer, and under respiratory studies,
3 smoking and respiratory disease, and there are very
4 few.

5 Q. Well, Dr. Cummings, you, yourself, understand
6 that the mission of CTR is to fund research into the
7 etiology or the causation of diseases that are alleged
8 to be related to smoking; correct?

9 A. Well, I would think it was Dr. Cook-Little, I
10 believe, that had cited in 1954 in a press conference
11 that the mission was to get the facts on smoking and
12 health, when the -- this was at the press conference
13 announcing the CTR.

14 Q. But you understand that the stated mission of
15 CTR involves research into the causation, the etiology
16 of the diseases, like cancer, like cardiovascular
17 disease, that are alleged to be related to smoking?

18 A. I understand -- yes. I understood the
19 purpose of the CTR is to find out whether smoking was a
20 cause of these diseases.

21 Q. Well, Dr. Cummings, didn't you exactly
22 characterize that as the mission of CTR in the article
23 you wrote in 1989 -- or 1991, I guess it was?

24 A. I haven't memorized every word, so if you've
25 got the paper, I'd be happy to look at it.

1 Q. Dr. Cummings, I'll hand you what I would
2 request the Court to mark as Defendants' Exhibit G, I
3 believe, for identification.

4 THE COURT: All right. What letter?

5 THE CLERK: G.

6 THE COURT: G for identification.

7 (Defendants' Exhibit G was marked for
8 identification.)

9 THE COURT: I thought the other one was --

10 MR. MOODHE: F.

11 THE COURT: The other one was F.

12 THE CLERK: It's G.

13 THE COURT: Well. Okay. I see. The other
14 one was a number.

15 BY MR. MOODHE:

16 Q. Dr. Cummings, is Defendants' Exhibit G a
17 reprint of the article you were discussing this
18 morning?

19 THE COURT: Excuse me one second. Does that
20 have a number on it?

21 MR. MOODHE: It does not, Your Honor.

22 THE COURT: It does not. That's why. Okay.

23 All right.

24 A. This is the article that I published in the
25 American Journal of Public Health. This is a copy of

1 the article.

2 Q. Okay. If you turn to the second page, middle
3 column, under the table, do you see there how you
4 characterize CTR's stated mission?

5 A. It said: Despite its stated mission to fund
6 research into the etiology of diseases alleged to be
7 related to tobacco use, only one in six CTR-funded
8 scientists reported conducting research focused on the
9 health effects of tobacco.

10 Q. Okay. So you understand that the stated
11 mission was to fund research into the etiology of
12 diseases alleged to be related to the use of tobacco?

13 A. I understood that from reading CTR mission
14 statements, from documents that were put out by the
15 Tobacco Industry Research Council, which was the
16 forerunner of the Council for Tobacco Research, such as
17 Dr. Cook's presentation at the press club. So there
18 are many.

19 I think most people -- The Frank Statement
20 says that they're funding research to get the facts on
21 smoking and health.

22 Q. Now, Doctor, I think as we've established
23 before, and I don't mean to be repetitive, but you
24 would concede that you are not an expert in these
25 various areas relative to physicians who have

1 A. You might be, sure.
 2 Q. And a related bias or a second type of bias
 3 is the concern you would have that the person answering
 4 the question is giving what is called a socially
 5 desirable response; correct?
 6 A. That would be another concern, potentially.
 7 Q. And a socially desirable response is one that
 8 the person answering the question thinks that the
 9 person who's asking the question wants to hear or the
 10 audience who's reading the results might want to hear;
 11 is that fair?
 12 A. That's a fair characterization of that type
 13 of bias.
 14 Q. Okay. Would you also be concerned if, in
 15 reviewing the report, you found statements that had
 16 crept into the report that really weren't supported by
 17 the data?
 18 A. I'm not sure what you're referring to.
 19 Q. If you read a report and you realized that
 20 certain of the statements that were contained in the
 21 report were, in fact, not supported by the data, would
 22 that concern you --
 23 A. Sure.
 24 Q. -- in terms of how you look at it?
 25 A. Sure.

1 Q. Now, you had completed your review of the
 2 1989 annual report of CTR in terms of looking at the
 3 titles, before you sent out your questionnaire;
 4 correct?
 5 A. Right. We get -- at Roswell Park, the annual
 6 reports routinely got sent to our library.
 7 And, you know, this notion that there was a
 8 controversy among scientists about whether smoking
 9 caused disease -- in fact, there were ads that I'd seen
 10 taken out by the tobacco companies talking about the
 11 health controversies. This is a scientist at a cancer
 12 center. There was the controversy. There weren't any
 13 of the scientists that I knew and worked with at
 14 Roswell Park who believed that there was this
 15 controversy.
 16 And this is sort of the genesis of our
 17 survey, to find out whether, in fact, that there was a
 18 controversy, and what better place to go than to ask
 19 the people who were getting funded by the industry.
 20 Q. By the time you sent out your survey, you,
 21 yourself, had already come to the conclusion that CTR
 22 was not a legitimate organization that was sincerely
 23 interested in investigating the relationship between
 24 smoking and disease; isn't that right?
 25 A. I had that hypothesis, yes.

1 Q. That was your opinion?
 2 A. That was a hypothesis that we were going to
 3 test. And we allowed that hypothesis to be tested by
 4 asking the recipients of the grants themselves.
 5 In reading the titles, in reading the
 6 abstracts, it appeared that very few of them had
 7 anything to do with trying to study the relationship
 8 between smoking and disease. And not being the expert,
 9 and the best person to get the information would be
 10 right directly from the source, we sent a survey out to
 11 see whether my opinion about that was correct.
 12 Q. Okay.
 13 A. It was confirmed.
 14 Q. Okay. Now, there were 204 grantees listed in
 15 the 1989 annual report; correct?
 16 A. I believe so, yes.
 17 Q. I think you can look at your articles. That
 18 will help refresh your recollection.
 19 Now, you mentioned before that you also
 20 surveyed the U.S. grantees, not the overseas grantees.
 21 You said 99 percent. I think that really works out to
 22 something like 87 percent.
 23 A. Okay. I'll grant you that.
 24 Q. Okay. Now, on Page 894 of the article, you
 25 confirmed that only 77 out of the 179 survey forms that

1 you sent out were actually returned; correct?
 2 A. Right.
 3 Q. And that works out to just about 46 percent
 4 of the grantees?
 5 A. That's right. It's stated right there on the
 6 second column, in the second paragraph of the article.
 7 This is pretty typical for mailed questionnaires. Most
 8 people take a mailed questionnaire and they file it in
 9 the circular file. They throw it in the garbage.
 10 And we undertook an effort, actually, to
 11 enhance the return of these by actually -- the survey
 12 itself was larger. We blew it up on a very large piece
 13 of paper and sent it in a larger envelope. It makes it
 14 a little harder to throw out than a smaller
 15 questionnaire.
 16 And there were really not that many questions
 17 on it, and the questions were very easy to read. So,
 18 we tried to enhance the return rate on it, but this is
 19 pretty typical of most mailed surveys of health
 20 professionals.
 21 I mean, these are very busy people,
 22 scientists who have a lot of responsibilities, and
 23 probably don't have a lot of time to spend sending
 24 back -- figuring out surveys and sending them back. We
 25 didn't pay them to return this to us or anything.

1 Q. Just getting back to what I asked you about,
2 46 percent of the people, that was the response rate?

3 A. That's correct. It's 46 out of -- the 46
4 percent response rate is out of 166.

5 13 of the surveys that we sent out, we had
6 the incorrect mailing address. The mailing address
7 that we got from the report or that we actually
8 searched for when they indicated if they had an
9 institute they were at, we tried to find their address
10 so we could track them down, and 13 of the envelopes
11 came back with incorrect addresses. They were dropped.

12 So there were 166 eligible respondents in the
13 U.S., and 77 of those returned the questionnaire. 46
14 percent is the response rate.

15 Q. Now, Doctor, the 46 percent response rate,
16 you characterize yourself as a low response rate that,
17 quote, potentially limits the generalizability of the
18 findings, correct?

19 A. That's correct.

20 Q. Now, in fact, the response rate was something
21 less than that, if you consider the fact that the
22 number came back undelivered and you didn't survey
23 grantees that were located overseas, that it would be
24 down around 37 percent, would you agree with me about
25 that?

1 A. Well, you wouldn't count those, because I
2 indicated right off the bat they were excluded. They
3 were excluded for the following reasons.

4 The student, Amy Gingrass, who is no longer a
5 student, she was an intern with us during the summer,
6 this is the summer project that she worked on to
7 collect this information. There was a rather short
8 timeline to gather this so she could complete her
9 report.

10 As a result of the time line, we decided to
11 limit, since the vast majority of grant recipients were
12 U.S. recipients, to the U.S. group.

13 Q. In fact, by the time you sent out this
14 survey, CTR had funded a total of 726 investigators;
15 had they not?

16 A. I'd have to go check their reports, but
17 there's also a tally in the annual reports.

18 Q. Look at Page 5 of the '89 annual report. I
19 think you'll see the numbers there.

20 A. Okay.

21 Q. If you take the percentage that you surveyed
22 relative to the total number of scientists that had
23 actually been funded by CTR over the years, that works
24 out to just about ten percent; right?

25 A. Right.

1 Q. And, in fact, if you consider the fact that
2 since then CTR has funded roughly another 400-some-odd
3 grantees, the percentage drops even lower?

4 A. Right.

5 Q. And I take it, therefore, as a matter of
6 mathematics, that you'd agree with me that that lower
7 rate limits even more the generalizability of the
8 findings in the survey?

9 A. Well, it doesn't discount the
10 generalizability of the findings. What it does is it
11 says we only sampled a smaller group.

12 I mean, surveys are done all of the time in a
13 population where you survey a couple of thousand people
14 to represent the opinions and attitudes or voting
15 practices of the entire population of several, you
16 know, 200 million Americans that are in the United
17 States.

18 So, the fact that we only actually got
19 questionnaires back from 70 something, it's true, we
20 only selected one year, and that's what we reported on
21 in our paper.

22 Q. Okay. So, it basically -- it's fair to say
23 this is a one-year snapshot?

24 A. That's what we said.

25 Q. Okay. Now, in your article, you did try to

1 offer some explanations as to why the response rate was
2 low; did you not?

3 A. Well, one explanation, this is pretty
4 typical, busy people, they're not going to fill out
5 questionnaires that always arrive -- this was a survey
6 done during the summer, so respondents, you know, are
7 on vacation, so they don't necessarily respond to
8 everything they get in the mail, if they're on vacation
9 and they're not there to do so.

10 We looked at characteristics of responders
11 and nonresponders, to look for bias. And what we found
12 was that -- we didn't have information -- a lot of
13 information. We certainly didn't have the opinions
14 that we were seeking in our survey from the
15 nonrespondents, but we did have information, whether
16 they were an M.D. or a Ph.D., the institutions they
17 were located in, the type of institution being a
18 hospital or university, and we looked at whether there
19 was differences in who responded and who didn't by
20 those characteristics, the ones that we knew about.

21 And there were no differences, which is one
22 way to look for bias, and on that basis, we concluded
23 that, perhaps the 46 percent who did respond were, in
24 fact, representative of the larger group.

25 Q. Dr. Cummings, my question simply was, in your

1 BY MR. MOODHE:

2 Q. Well, just in case they didn't know, you
3 spelled out those views in the cover letter; didn't
4 you?

5 A. Yes, I did.

6 MR. MOODHE: Your Honor, I'm going to have
7 marked as Defendants' Exhibit H, a one-page document on
8 the letter of Roswell Park Cancer Institute.

9 BY MR. MOODHE:

10 Q. Dr. Cummings, I'm going to hand to you a copy
11 of Defendants' Exhibit H and ask you to identify that,
12 please.

13 (Defendants' Exhibit H was marked for
14 identification.)

15 A. This is the cover letter that we sent along
16 with the survey to identify what the purpose of the
17 survey was, and this was a letter that -- and our
18 survey, by the way, had to go through our scientific
19 review committee at Roswell Park, and this is part
20 of -- some of the wording in here is required by our
21 research committee for doing scientific research at
22 Roswell, human subjects review.

23 Q. And, Dr. Cummings, just because I know that
24 that copy is a little illegible, because I blew -- it
25 was blown up from microfiche, is that correct?

1 A. This was rather -- this study was done quite
2 a number of years ago. In order to locate the actual
3 letter when it had been requested in one of my prior
4 depositions, I did locate it, it was microfiched, and
5 that's why it looks so bad. It's a copy off of
6 microfiche.

7 Q. I've handed you a re-typed version of that
8 letter, which is based on, I think, a review you had
9 previously done of the letter, and I would just ask
10 you, if you would, to confirm that the typed version is
11 an accurate recital of the contents of the document
12 itself.

13 A. It looks to be.

14 Q. Okay.

15 THE COURT: That being the case, why don't we
16 just attach it to the exhibit --

17 THE WITNESS: Sure.

18 THE COURT: -- so we'll have something that
19 we can understand.

20 BY MR. MOODHE:

21 Q. Dr. Cummings, is this the text of the cover
22 letter?

23 A. Yes.

24 Q. And this is the cover letter itself?

25 A. That's right.

1 Q. As we can see, the cover letter was on
2 Roswell Park Cancer Institute letterhead; correct?

3 A. Right.

4 Q. Would you just read to the jury the first
5 paragraph -- well, just read through here (indicating)
6 so we can have that entered into the record, please.

7 A. The first paragraph?

8 Q. Up to the second sentence.

9 A. Sure. This is addressed to Dr. Whoever.

10 Dear so and so: The question of whether
11 tobacco use is a cause of disease in humans has been
12 the subject of thousands of research studies. Though
13 the scientific evidence against smoking appears to be
14 overwhelming, the tobacco industry pretends that it is
15 not. Tobacco spokespersons frequently employ terms
16 that imply that there remains serious scientific doubt,
17 controversy and uncertainty over smoking as a major
18 source of disease. By suggesting that the relationship
19 between smoking and disease is open to scientific
20 question, I believe the cigarette companies have
21 misrepresented the views of the majority of scientists.

22 Q. Okay. You'd agree with me that this letter
23 very bluntly states the belief that whether tobacco use
24 causes disease is not open to scientific question;
25 correct?

1 A. No. This was stating the hypothesis that we
2 wanted them to respond to, to see whether, in fact,
3 there was scientific controversy and doubt among the
4 scientific community, and specifically scientists
5 funded by the CTR, that would deviate from this
6 opinion.

7 Q. This sentence says: Though the scientific
8 evidence against smoking appears to be overwhelming,
9 the tobacco industry pretends that it is not.

10 A. That's right.

11 Q. You also would agree with me, I take it, that
12 this letter very flatly accuses the tobacco industry of
13 making misrepresentations?

14 A. Yes. I believe they have.

15 Q. So, in essence, what this letter told people
16 who received the survey was that if you do not agree
17 that tobacco causes human disease, you, in fact, will
18 be going against the overwhelming scientific evidence
19 and aligning yourself with the tobacco industry that
20 has been making these representations; isn't that
21 right?

22 A. Well, yes. It actually -- I guess one could
23 construe it as that.

24 The question, particularly the first question
25 that we asked in the survey was carefully worded to ask

<p style="text-align: right;">Page 16569</p> <p>1 about causal relationship, not an association, not 2 statistics, the weight of evidence, to draw a causal 3 relationship between smoking and the various lists of 4 maladies that are there and ask for an opinion. 5 Q. I'll come back to that question in a second. 6 A. Sure. 7 Q. You would agree with me, then, that this 8 cover letter violates, grossly, protecting against 9 socially desirable responses? 10 A. No, I wouldn't agree with that opinion at 11 all. I think it states what we were trying to test. 12 And we were asking the scientists who's had received 13 grants from the Council for Tobacco Research whether 14 they agreed with that opinion. 15 You have to state the opinion so they could 16 indicate whether they agreed with it or not. 17 Q. So it's your testimony and your opinion to 18 this jury that this letter meets the standards of 19 conducting a neutral and unbiased survey? 20 A. This study was evaluated by the scientific 21 review committee at Roswell Park, a group of scientists 22 that review all of the scientific protocols that are 23 prepared at Roswell Park, and was judged to be 24 acceptable. There was a lot of discussion about this 25 particular project when we did it.</p>	<p style="text-align: right;">Page 16571</p> <p>1 THE COURT: I can do it at 8:30. 2 MS. LUTHER: Judge, we might have a problem 3 with the jurors. 4 MR. ROSENBLATT: I have to meet with my next 5 witness. 6 THE COURT: The jury can drop their kids off. 7 Come on. Put them on a bus. That's what buses are all 8 about. 9 MR. ROSENBLATT: Since he has to come back 10 anyway. 11 THE COURT: 9:00 tomorrow. 12 (The sidebar conference was concluded, and 13 the following proceedings were held in open court:) 14 THE COURT: All right. We're scheduling -- 15 trying to figure out the schedule. What we figured out 16 is to quit now and then pick this thing up at 9:00 17 tomorrow morning. Have you folks come in a little 18 earlier tomorrow, and we'll get underway here at 9:00. 19 You come here about 8:45, 8:50, thereabouts. And then 20 we'll pick it up here at 9:00. 21 Okay, folks. 22 (The jurors exited from the courtroom.) 23 THE COURT: Okay. Counsel, the survey 24 itself, do you want it marked for identification? 25 MR. MOODHE: Yes, Your Honor, please.</p>
<p style="text-align: right;">Page 16570</p> <p>1 This project was approved. We don't do 2 surveys that are not -- or any study, for that matter, 3 that is not approved by that scientific review 4 committee. 5 Q. My question to you, Doctor, was, is it your 6 opinion to this jury that this cover letter meets the 7 standards of conducting a neutral and unbiased survey? 8 A. The survey, basically -- yes. Yes. It is my 9 opinion. 10 Q. Now, let's go to the questionnaire. 11 The first question -- 12 MR. ROSENBLATT: Excuse me. 13 (Discussion off the record.) - 14 MR. ROSENBLATT: I'm just talking scheduling, 15 Judge. 16 THE COURT: That's what I'm concerned about. 17 MR. ROSENBLATT: Yes. 18 Why don't we go sidebar? 19 (Discussion off the record) 20 THE COURT: This is just concerning 21 scheduling. Don't be concerned about it. 22 (The following proceedings were had at 23 sidebar:) 24 MR. ROSENBLATT: We'd like to start at 9:00, 25 and we'll work it out.</p>	<p style="text-align: right;">Page 16572</p> <p>1 THE COURT: Mark this, Bill. 2 MR. HEIM: Judge, just to avoid, when we do 3 finish with Dr. Cummings, we'll want a little time to 4 take up some issues with respect to the next witness, 5 but I -- 6 THE COURT: Do we have a live witness coming 7 in after? 8 MR. ROSENBLATT: Yes. 9 MR. HEIM: Yes. 10 THE COURT: Who is that? 11 MR. ROSENBLATT: Dr. Alan Blum. 12 THE COURT: Blum. 13 MR. ROSENBLATT: B-l-u-m. 14 THE COURT: How much time do you think you're 15 going to need for that? 16 MR. HEIM: Half an hour. 17 THE COURT: All right. 18 MR. ROSENBLATT: For what? 19 THE COURT: Some issues regarding the next 20 witness. Let him know what the issues are. 21 MR. HEIM: I'll be happy to do that. 22 MR. ROSENBLATT: For a change. 23 MR. HEIM: He knows what they are. Limit, 24 limit, limit. 25 MR. ROSENBLATT: He's right about that. He's</p>

1 them?

2 A. No. That's exactly why we went ahead and
3 surveyed the scientists themselves, so they could tell
4 us.

5 Q. Okay. Let's go back to your survey now.

6 Now, Doctor, you agree with me that how a
7 question is answered depends upon how a question is
8 worded, correct?

9 A. Sure.

10 Q. And in designing a survey, as you've designed
11 surveys over the years, it's important to choose the
12 right words in order to get the information you're
13 looking for?

14 A. Right.

15 Q. Now, yesterday you indicated that in your
16 survey you found that an overwhelming majority of
17 scientists who responded to the survey reported their
18 belief that smoking causes lung cancer and other
19 diseases, correct?

20 A. Well, they answer they Strongly Agree or
21 Moderately Agree to the responses to question one.

22 Q. Now, in fact, the phrasing you used for
23 question one was not: Do you believe the scientific
24 evidence proves a causal relationship? The question
25 you asked was: Indicate the degree to which you

1 BY MR. MOODHE:

2 Q. Now, Doctor, I'm correct that in answering
3 these questions up here, you did not achieve or get a
4 unanimous response of a strong suggested causal
5 relationship with any of these diseases, did you?

6 A. Well, we actually report in Table 1 of the
7 article the percentages of respondents who checked off
8 each category. For example, when you look at lung
9 cancer, 93.2 percent checked off Strong; 5.4 suggested
10 Moderate; 1.4 said Slight. And no one said Not
11 Established.

12 Q. That's right.

13 A. And so on for the other ones. Emphysema
14 followed a similar relationship: Shorter life
15 expectancy, 76 percent said Strong; 16.7 percent said
16 Moderate; 4.2 said Slight; and 2.8 said Not
17 Established.

18 Q. So, the fact of the matter is -- lung cancer,
19 by the way, that was the disease where you got the
20 highest percentage of people responding to strong,
21 correct?

22 A. Yes. They were actually -- other than
23 bladder cancer, everyone was well over -- you know, the
24 majority, in all cases, checked Strong. Bladder
25 cancer, 25 percent said Strong, and 58 -- 56, I think

1 believe the scientific evidence suggests a causal
2 relationship with cigarette smoking, correct?

3 A. That's the way the question is worded, yes.
4 I mean -- it was worded --

5 Q. Suggests --

6 A. It was worded that way because in scientific
7 questions, proof is basically weight of evidence, and
8 so you accumulate the weight of evidence on an issue,
9 to draw causal conclusions. You never prove anything
10 from a single study; you look at the weight of
11 evidence.

12 Q. Well, you didn't ask the simple question: Do
13 you believe cigarette smoking causes any of these
14 diseases, did you? You used the word "suggests,"
15 right?

16 A. That's what we -- that's the way the question
17 is worded.

18 Q. Now, do you have the article, the reports,
19 the results of your survey?

20 (Witness handed document.)

21 THE WITNESS: Thank you.

22 MR. MOODHE: For the record, I think that's
23 Defense G.

24 THE WITNESS: Yes. G.

25 THE COURT: G for I.D.

1 it is -- it's a little hard to see because it's a
2 smudged copy -- 56 percent or so said Moderate or
3 whatever.

4 Q. The fact of the matter is that when you ask
5 the question whether the scientific evidence suggests a
6 causal relationship, you still got a variety of views
7 about the strength of that suggested relationship that
8 ranged in all cases from strong to at least slight; and
9 with only the exception of lung cancer, people were
10 also checking "not established," correct?

11 A. That's right. There was -- I don't know how
12 that would work out in terms of the number of people,
13 but 1.4 percent -- it's probably one person -- said
14 Slight, out of the 77 respondents.

15 To me, that's fairly overwhelming evidence
16 that the vast majority -- and I think that's the way we
17 summarized the conclusion of our study: Despite
18 overwhelming evidence documenting the hazards of
19 cigarette smoking, the tobacco industry denies that
20 smoking has been proven to cause disease.

21 And I'm just trying to find the actual
22 summary statement here.

23 This paper presents results of a survey of
24 CTR-funded scientists relating their beliefs of the
25 health effects posed by smoking cigarettes. The vast

1 majority of scientists funded by the CTR believe
2 cigarette smoking is an addiction that causes a wide
3 range of serious, often fatal, diseases.

4 And I think that's what the survey reported.

5 Q. Okay. You didn't do any follow-up
6 interviewing or surveying of any of the respondents
7 after this initial question was sent out, did you?

8 A. Only people at Roswell Park. That was with
9 conversations with people.

10 Q. But you didn't do a second survey?

11 A. No.

12 Q. And, therefore, you don't know the reasons
13 why some scientists checked Moderate, some scientists
14 checked Slight, and some scientists checked Not
15 Established, do you?

16 A. No, I don't know that.

17 Q. And, therefore, you don't have any basis to
18 believe that the views that were expressed in this
19 questionnaire were anything other than their honest,
20 sincere, best scientific judgment, do you?

21 A. Right. I believe it is their honest, best
22 scientific judgment, and that is reflected in the fact
23 that the vast majority of scientists believe that
24 smoking is a cause of lung cancer. The weight of
25 evidence suggests a causal relationship.

1 Q. Okay.

2 A. And actually, this particular question was
3 taken from a similar question that had been asked in a
4 survey of the public in the mid 1980s, except they
5 didn't ask the public about causal relationship, just
6 their beliefs. Actually, it's the same list of
7 responses, and we were curious to see whether the
8 scientists' opinions would deviate from the public.

9 Q. Okay. Well, let's move from the suggested
10 causal relationship question to these two questions
11 here, three and four.

12 These two questions ask: Does any of your
13 current research focus on the health effects of tobacco
14 use? And four asks: Have you ever conducted research
15 on the health effects of tobacco use?

16 Correct? I read those right?

17 A. That's what it says.

18 Q. Okay?

19 A. Yes.

20 Q. Now, in your survey, as I understand what you
21 did, you basically collapsed the data for these two
22 questions?

23 A. We analyzed them separately, but actually we
24 did collapse it because there were very few people who
25 answered Yes to either one of the questions, quite

1 frankly. I think it was one out of six when we
2 collapsed it together.

3 Q. Now, Doctor, when you wrote this question or
4 these questions, you knew, from having looked at the
5 titles of the CTR grantees' work, that most of them did
6 not seem to involve directly the use of tobacco or
7 cigarettes as part of the experimental protocol,
8 correct?

9 A. I didn't really know. As I said, I can read
10 the abstracts. You can read titles. But the best way
11 to get the information is to ask the investigator
12 themselves directly, which is why we ask those
13 questions.

14 So it's a way of testing that hypothesis, as
15 I stated in the cover letter. It was a hypothesis that
16 perhaps they weren't being supported. They weren't
17 doing research on smoking and health. We wanted to
18 find out whether they were.

19 Q. Well, you chose to use the words "tobacco
20 use" in this question, didn't you?

21 A. Yes. I didn't have you to help me word the
22 question. I thought it was a fairly straightforward
23 question.

24 Q. My phone number is in the book.

25 Doctor, in fact, the question you didn't ask

1 was whether their research related to the investigation
2 of diseases associated with smoking, right? You didn't
3 ask that question?

4 A. Well, since there are so many diseases
5 associated with smoking, it would be hard to find
6 doctors in medical centers, where most of this research
7 was going on, that weren't doing research on diseases
8 that have been linked to smoking.

9 Q. Well, is it your opinion, Doctor, that
10 investigating diseases that have been associated with
11 smoking is not an investigation of smoking and health
12 issues?

13 A. It's not a direct one.

14 Q. I mean, if you're the Council for Tobacco
15 Research, and the statement, when the Council was
16 established in 1954, was to get the facts on smoking
17 right from the director of the -- the first director of
18 the Council, it seemed odd to me that they weren't
19 studying smoking and health. In fact, there was very
20 little research that I've ever come across that talks
21 about looking at things like filter fiber fallout in
22 cigarettes or design aspects of cigarettes.

23 There are a few isolated studies, but the
24 vast majority appear to me not to be linked.

25 So we asked the scientists themselves, and

1 confirmed my hypothesis. Very few of those
2 investigators reported that their current research,
3 which meant the research that they were getting
4 currently from CTR, or any of the research in their
5 career, because you would think you would be funding
6 people who had expertise in this area, had any research
7 background in studying the direct link between tobacco
8 and health.

9 Q. Well, Doctor, if a respondent looked at this
10 question and said to himself or herself: Gee, I'm not
11 using cigarettes or tobacco products as part of my
12 experiment or protocol, you'd expect that that
13 researcher would check No, correct?

14 A. Yes.

15 Q. However, if that very same researcher said to
16 himself or herself: Well, you know, the research I'm
17 doing is to understand exactly how cancer is caused,
18 because that might give us some information to
19 understand the relationship of cigarettes and other
20 factors in leading to cancer, you would expect that
21 researcher to check No to that question, as well?

22 A. I mean, to say that in order to be able to
23 say anything about smoking and health you have to have
24 a full understanding of all of the causes of cancer, it
25 is ludicrous, absolutely crazy.

1 Q. Well --

2 A. And it's not.

3 Q. -- that's not my question.

4 A. But that seems to be what you're implying.

5 Q. No. My question was, you would have expected
6 that researcher to have checked No?

7 A. I --

8 Q. That's the way they research.

9 A. They're going to check whatever they're going
10 to check. They read the question and interpret it
11 however they wish to interpret it. They had the cover
12 letter which I think was a fairly clear explanation of
13 what the study was all about.

14 Q. And that's the cover letter that you believe
15 was neutral and unbiased, correct?

16 A. It stated the hypothesis that I was
17 attempting to gather information on.

18 Q. Doctor, let me turn to one other subject for
19 a moment.

20 You mentioned yesterday that your
21 institution, Roswell Park, does not accept CTR funding
22 anymore, correct?

23 A. That's right.

24 Q. It did for many, many years accept CTR
25 funding, correct?

1 A. There were a handful of scientists over the
2 years who have received support.

3 Q. Now, there are many institutions in this
4 country that continue to accept CTR funding, correct?

5 MR. ROSENBLATT: Well, I'll object to that,
6 if by continuing he means up until this day --

7 THE COURT: To a certain time frame or
8 whatever, the present day or --

9 MR. MOODHE: Let me rephrase the question.

10 BY MR. MOODHE:

11 Q. Through the time that Roswell Park instituted
12 its policies, other universities and research
13 institutions did not adopt a similar policy, did they?

14 A. Well, other institutions have adopted -- I
15 don't know whether we were the first to adopt the
16 policy not to take money. It was a source of a lot of
17 discussion in our institution, and our association of
18 scientists, of which I'm a member, debated this issue
19 and voted to discontinue the acceptance of money from
20 the Council.

21 Q. But you're aware that Yale University, Johns
22 Hopkins Medical School, Stanford University, University
23 of Miami, University of Florida, Baylor --

24 A. Sure.

25 Q. -- University of Minnesota, Mayo Clinic, have

1 not adopted that policy, correct?

2 A. Many have not.

3 Q. And am I correct that the policy at Roswell

4 Park was not based on any notion that the research that
5 CTR was sponsoring and funding was of poor quality or
6 not worthy of funding?

7 A. No. I've never stated that any of the
8 research that's been funded has been poor quality. I
9 suspect there's probably poor quality in some of the
10 studies. But that's -- I mean, there's some excellent
11 studies, and some of the people that have received
12 money I would consider good investigators.

13 Q. And it is your view, your opinion, that no
14 matter how good the research project is, and no matter
15 whether it's directly related to cigarette smoking and
16 health or not, that investigators should not accept
17 funding from the Council for Tobacco Research?

18 A. Well, the arguments that were made in front
19 of our association of scientists, and I made those
20 arguments, along with a colleague of mine, Dr. John
21 Pauly, formally as we debate this issue in our
22 institution, was that we were not disputing the quality
23 of the science or the qualifications of the
24 investigators who had taken money from the Council in
25 the past, but because the fact that the Council in

1 other trials, like this one had, in fact -- the
2 industry had used the fact that research money had gone
3 to places like Stanford and Roswell and so on, and by
4 association, a cancer institute, like Roswell Park, was
5 being linked with something that they didn't believe.
6 They didn't believe that there was a controversy on the
7 health effects of smoking, particularly as it related
8 to cancer. And our scientists, who, by the way, rely
9 on getting grant funds, so it's stuff to make a
10 decision not to get grant funds that are fairly easy to
11 get.

12 I mean, the Council is another source. I
13 mean, you have to go through a competition and so on,
14 but it was a source of funds. They chose to vote not
15 to take the money from the Council.

16 Q. You're not suggesting that any of the
17 colleagues that you have at Roswell Park applied for
18 and obtained funds from the Council for Tobacco
19 Research on the understanding that that money was
20 supposed to be used to fund only smoking and health
21 research, but recognizing that their own research did
22 not? You're not suggesting that, are you?

23 A. Well, I know some of the investigators who
24 have gotten money from the Council, and they're not
25 doing research on smoking and health. I've asked them

1 cancer is caused, that you would rather take the risk
2 of not having that break-through, than to allow a
3 tobacco company to take pride in the fact that it
4 funded that research?

5 A. That's ridiculous. That's absolutely absurd.

6 I mean, if you have something that's going to
7 be a break-through, it will be funded and supported by
8 many other organizations and groups that don't have the
9 ties of pushing the leading cause of preventable death
10 in the United States today, which is cigarettes.

11 And it's incomprehensible that a cancer
12 institute, that's dedicated to the mission of
13 preventing cancer, diagnosing cancer and treating
14 cancer patients, would take money from a group that's
15 out there saying there's a scientific controversy about
16 the health effects of smoking, when there is none.

17 Q. Dr. Cummings, the net result is -- well, let
18 me step back.

19 Science is funny, in that the fact that you
20 never know exactly where research is going to take you
21 and what research is going to be the break-through;
22 would you agree with that?

23 A. No. I think, you know, science builds on the
24 weight of evidence that comes before. It just doesn't
25 pop out of the sky.

1 directly: What is your research about? It has nothing
2 to do with smoking and health.

3 Q. Well, are you suggesting, therefore, that
4 they knowingly applied to the Council for Tobacco
5 Research for funds that were earmarked for smoking and
6 health issues?

7 A. No. They applied because it was money that
8 they could use to get to support their laboratory
9 research which they valued and thought was important,
10 and may, in fact, be very important research. In fact,
11 if it's good enough research, the argument that we made
12 is that other funding agencies, without the track
13 record that the Council has made, is being basically a
14 public relations front for the tobacco industry, which
15 is my opinion of the Council. They can get their funds
16 from other sources, such as the National Institutes of
17 Health, the National Science Foundation and American
18 Cancer Society.

19 Q. You testified yesterday, I thought, that
20 obtaining funds is very difficult and very competitive?

21 A. Yes.

22 Q. And the net result of the policy that Roswell
23 Park has instituted is that even if the research that
24 would have been funded by CTR at Roswell Park had been
25 the break-through in curing cancer or understanding how

1 Many times there are serendipitous
2 observations, but it's usually based on years and years
3 and years of hard work. So it's not a funny thing;
4 it's a lot of hard work.

5 Q. But you can't predict which of the thousands
6 of research projects in this country, which are ongoing
7 now investigating cancer, is going to be the
8 break-through project, can you?

9 A. Well, I mean, if you think that there's --
10 you obviously have the impression, like the public
11 thinks, in many ways, in which we try to communicate to
12 the public, that somehow there is going to be a magic
13 break-through; that today we don't know and tomorrow we
14 will know.

15 And that is just not the way it happens. It
16 happens over time, accumulating research, people
17 working every day harder and harder building upon the
18 evidence. It's not like a magic thing is going to
19 happen tomorrow.

20 Q. And that's why, after 45 years or more of
21 research, science still has unanswered questions about
22 how cancer is caused, right?

23 A. Yes. Many cancers, the causes are not very
24 well established, but for some, such as our leading
25 cause of cancer death, lung cancer, the cause is

1 about preemption. It doesn't mean you can't talk about
2 it. But you just can't get the liability because of
3 it. There is a big difference and distinction between
4 that. Just because you can't get liability, doesn't
5 necessarily mean it doesn't come into a case. There's
6 lots of legal processes that talk about events, but no
7 liability attaches because, by law, you can't get
8 liability.

9 MR. KIRBY: But if it's testimony, which it
10 would be improper for them to consider in connection
11 with the liability determination --

12 THE COURT: Yes. That's what they'll be
13 instructed at a later time.

14 MR. KIRBY: That's where the problem is.

15 THE COURT: I don't know. I suppose I could
16 tell them to forget it. It doesn't mean a thing. We
17 all know that. It doesn't mean a thing. Whether it
18 means anything to an appellate judge, who knows?

19 I know.

20 All right. I'll go ahead and do that.

21 (The sidebar conference was concluded, and
22 the following proceedings were held in open court:)

23 THE COURT: All right, folks. It might be an
24 appropriate time to discuss something very briefly with
25 you.

1 Throughout the course of the trial, at this
2 point you've heard the term used "preemption." At the
3 end of this case, we're going to give you some further
4 instructions as to the meaning of some legal terms and
5 doctrines, one of which would be this issue of
6 preemption.

7 And then references have been made to
8 warnings, and the Court will give you some instructions
9 as it regards to the warnings.

10 So as reference to this last answer by
11 counsel -- by the witness, I'm going to ask you as best
12 you can to disregard any references to public warnings
13 regarding the cigarette that they were talking about,
14 the Eclipse, and we will give you further instructions
15 later as to the effect and meanings of the term
16 "preemption" and its ramifications.

17 Okay.

18 BY MR. KIRBY:

19 Q. Dr. Cummings, the Eclipse cigarette is in
20 what's called consumer test markets right now in
21 Chattanooga, Tennessee and Lincoln, Nebraska, correct?

22 A. Yes. I believe it's also being tested in
23 Atlanta, Georgia and Los Angeles, as well as overseas,
24 Auxberg, Germany, under a different name, actually.
25 And then in Sweden under I think the name Hi-Q.

1 Inside is I guess the name in Sweden, and
2 Hi-Q is the name in Germany, but it's the same product.

3 Q. The first time the Eclipse cigarette was made
4 available in a consumer test market setting was in June
5 of 1996, correct?

6 A. That's right.

7 Q. And the cigarette has never been sold in
8 Florida?

9 A. I would assume that it hasn't been sold in
10 Florida. I don't know that for a fact.

11 Actually, in reference to the test markets,
12 there were test markets going on with the Eclipse
13 cigarette prior to Chattanooga and Lincoln, where it
14 was made available for sale.

15 In fact, I first learned of the Eclipse
16 cigarette from a smoker in Buffalo, New York, who was
17 participating in a consumer testing of a cigarette, and
18 they said -- somebody had contacted my office. This
19 person had contacted us and said: I'm smoking this
20 really unique cigarette. It heats rather than burns.
21 They showed us this videotape.

22 And I asked the individual to bring the
23 product into our laboratory, and Dr. Pauly took some
24 pictures of the product, and it appeared to be very
25 similar in design to Premier. This was in 1994.

1 And subsequently, there was an article that
2 appeared in the New York Times, I believe in November
3 of 1994, that reported on the Eclipse test marketing
4 that was going on in a variety of cities. I don't know
5 whether any of those cities were, in fact, in Florida.

6 Q. The test marketing that I was asking about
7 was in connection with the cigarettes being
8 commercially available, where somebody can walk into a
9 store and buy them. That didn't begin until June of
10 1996, did it?

11 A. That's right.

12 Q. And to your knowledge, Eclipse cannot be
13 purchased in the State of Florida?

14 A. To my knowledge. I mean, it's not being
15 sold. I don't think "can't" is a word. It's not being
16 sold currently in Florida.

17 MR. KIRBY: I have no further questions.

18 THE COURT: Anybody else?

19 MR. HEIM: Yes. Just two or three minutes.
20 I think I can be real quick.

21 CROSS EXAMINATION

22 BY MR. HEIM:

23 Q. Dr. Cummings, my name is Bob Heim. I
24 represent Philip Morris.

25 You testified yesterday very briefly, I think

1 you had some slides, about the new Philip Morris
2 product called Accord, and I think you mentioned it
3 just a moment ago.

4 A. Right. Actually, I brought an Accord with
5 me. I have -- if the jury would like to see them.
6 Actually, it's a little easier to look at the product
7 than see slides.

8 Q. I think there are going to be several people
9 who will be testifying about Accord, so there will be
10 plenty of opportunity for the jury to see it, but I
11 wanted to ask you about something in particular.

12 And you used a term yesterday, and I think
13 you used it again today, that -- about biological
14 activity. Now, you used the term "less biological
15 activity."

16 That term, "less biological activity," that's
17 a term commonly used in medical and scientific
18 community referring to smoking --

19 A. It usually comes from -- the term comes from
20 posters by RJ Reynolds and Philip Morris in reference
21 to the Eclipse cigarette and EHC, the
22 electrically-heated cigarette, which is Accord, and
23 most of us in cancer research refer to that as causes
24 cancer, less biological activity, potential to cause
25 cancer.

1 Q. That was my question. When you used the
2 term, used it several times yesterday, you used it
3 again today, what you're talking about is the potential
4 for causing cancer, when you use the term "less
5 biological activity," correct?

6 A. Well, there are various toxicological tests
7 that are done, and there are a range that were done on
8 Eclipse and have been done on Accord, and there are a
9 way of judging, at least in the short term, the
10 potential biological activity of the smoke.

11 Q. Yes. I'm not asking you about what it is. I
12 was curious, because I heard you use the term a number
13 of times, and I wanted to make sure the jury understood
14 what you meant by the use of the term.

15 And is it fair to say that what you mean when
16 you do a slide presentation like that, and you use the
17 term "less biological activity," you're referring to
18 less potential for causing cancer; is that a fair --

19 A. That's --

20 Q. I'm just trying to get at what you're --

21 A. Sure.

22 Q. -- when you're using the term, what you mean.

23 A. That's one interpretation. Certainly, that's
24 one of the views that I have, is potential for causing
25 cancer. It doesn't really tell you exactly whether

1 that would occur. But this is a term where they even
2 reference this, "potential to cause cancer," in some of
3 the documents that I've read right from the industry
4 when they refer to less biological activity, in
5 relationship to, for example, painting the backs of the
6 mice, like I showed, and cancer occurring.

7 Q. So the answer to my question is that when you
8 were giving your slide presentation and you were using
9 the term "less biological activity," you were referring
10 generally to less potential for causing cancer?

11 A. Well, in general. I was actually referring
12 to the way the terms had been used by the tobacco
13 industry scientists.

14 Q. Have you heard the term used among others
15 that are not tobacco scientists in the medical
16 community?

17 A. Absolutely.

18 Q. You're familiar with the product, of course,
19 because you had a slide about it. I can show you. I
20 guess you had two slides about it, to be accurate, and
21 that product, you would expect, involved a fair amount
22 of R&D money to develop, research and development? I'm
23 sorry. I know it's a term you understand. But it would
24 have -- you would expect it to have involved a fair
25 amount of research and development money to put

1 together?

2 A. This is Accord?

3 Q. Yes, sir.

4 A. I think they've even publicized the fact that
5 they've spent a large amount of money in bringing that
6 product to the test market currently. I think 200
7 million was what I saw quoted in the newspaper. That
8 wasn't me; that was somebody I believe from Philip
9 Morris.

10 Q. You're helping me out because I didn't know
11 the number. I was just referring to a large amount of
12 money. 200 million dollars?

13 A. Right.

14 Q. Okay.

15 A. That's a drop in the bucket. One percent of
16 market share for a brand out there, I was told, was 500
17 million dollars or half a billion a year.

18 Q. Well, that's another interesting observation,
19 as to what's involved in one percent of a market share.

20 So how much did you say it was?

21 A. About a half a billion.

22 Q. Half a billion?

23 A. Yes. 500 million.

24 Q. So if you can move one percent, from one
25 brand -- from one company to another, how much is that

1 in human serum had anything to do with answering the
2 question as to whether cigarette smoking causes
3 disease?

4 A. Well, it would not on the surface look like
5 it had anything to do with it. You'd have to go ask
6 the investigators themselves, which is, again, as I've
7 stated previously, why we did our survey of CTR
8 scientists.

9 Q. Now, your article that appeared in the --
10 your article on the Council for Tobacco Research, which
11 appeared in the American Journal of Public Health in
12 July of 1991, in terms of informing the reader -- and,
13 by the way, the reader of these articles -- this
14 article would be comprised -- are they just general
15 members of the population or people with scientific
16 backgrounds, generally?

17 A. I would assume people with scientific
18 backgrounds. Most of the people that subscribe to the
19 American Journal of Public Health, the Journal of the
20 American Medical Association, have an interest in
21 public health, usually have degrees in public health or
22 medicine.

23 Q. Now, you say this paper was submitted to the
24 journal October 29, 1990, and accepted with revisions
25 March 6th, 1991. So it was about four and a half

1 months between the time the article was submitted and
2 the time you were told by the journal: Hey, it's
3 accepted. We're going to -- you know, we're going to
4 publish your article.

5 Is this a peer-reviewed journal?

6 A. Yes, it is.

7 Q. Okay. And then it was accepted in March of
8 '91, and it was published in July of '91; is that
9 correct?

10 A. That's correct.

11 Q. Okay. Do you have the article in front of
12 you?

13 A. Uh-huh.

14 Q. Go to the last page. Really the last
15 paragraph.

16 "We suggest that, rather than sponsoring" --

17 A. Okay.

18 Q. And read that to the end.

19 A. "We suggest that, rather than sponsoring a
20 genuine program of research into questions of tobacco
21 use and health, the CTR is a public relations vehicle,
22 intended to foster a false impression that cigarette
23 manufacturers are interested in investigating the
24 smoking and health question. We believe that such
25 misuse of science raises serious ethical questions for

1 scientists who accept funding through CTR or similar
2 industry-sponsored entities. Even assuming that
3 adequate funding is not available elsewhere, tobacco
4 industry-supported scientists must ask themselves
5 whether the value of their research in expanding the
6 body of biomedical knowledge outweighs its utility in
7 furthering corporate interests of a business which
8 kills 434,000 Americans every year."

9 Q. This came out in July of '91. Do you stand
10 by what you have just read today?

11 A. Yes. And the scientists at Roswell Park
12 stand by that, too, which is why we voted to no longer
13 take money from the Council for Tobacco Research.

14 Q. I know you're trying to catch a plane, so I'm
15 moving as fast as I can.

16 This is the letter that went to the
17 scientists funded by the Council for Tobacco Research,
18 along with the survey; is that correct?

19 A. That's correct.

20 Q. Okay. Now, in the very first paragraph, the
21 language appears: Though the scientific evidence
22 against smoking appears to be overwhelming, the tobacco
23 industry pretends that it is not.

24 To your knowledge, did any scientist, any
25 Ph.D., any M.D., who got this letter and got your

1 survey, call up or write you a letter and say: Hey,
2 you know, you're not being fair to the tobacco
3 industry. I don't agree with that. They're not doing
4 these bad things.

5 Did anyone say that?

6 A. No one.

7 THE COURT: Bill, do you have the number?

8 THE CLERK: Yes. Defense Exhibit H.

9 THE COURT: All right. H for I.D.

10 BY MR. ROSENBLATT:

11 Q. Now, just read this paragraph to yourself,
12 this second paragraph.

13 And my question to you simply is, does that
14 represent to you that you're being straightforward with
15 these scientists, or are you trying to trick them in
16 some way?

17 A. We weren't trying to trick anyone. And what
18 we stated was: By suggesting that the relationship
19 between smoking and disease is open to scientific
20 question, I believe the cigarette companies have
21 misrepresented the views of the majority of scientists.
22 In order to evaluate this question, I am polling
23 scientists who have published studies on smoking and
24 health, and/or have received research support from
25 organizations interested in tobacco and health issues

1 to ascertain their beliefs about the relationship
2 between cigarette smoking and disease.

3 Q. Oh, you had mentioned in one or a couple of
4 your answers yesterday about a professor Kenneth Warner
5 from the University of Michigan, who tried to do a
6 similar survey?

7 A. Yes.

8 Q. And tell us about that.

9 MR. MOODHE: Objection, Your Honor.

10 THE COURT: I'm sorry?

11 MR. MOODHE: Objection, Your Honor.

12 MR. ROSENBLATT: It came up yesterday with
13 Mr. Moodhe's question.

14 THE COURT: Let's go sidebar for a second.

15 (The following proceedings were had at
16 sidebar:)

17 THE COURT: Okay. So the reference was made
18 on cross?

19 MR. MOODHE: What happened yesterday was that
20 when I was examining Dr. Cummings, I asked him the
21 question about his survey, a statement in his survey
22 where he said that the scientists feared industry
23 retribution. I asked him what -- I asked him if that
24 was based on sheer speculation, which is what he
25 testified to last year in this trial.

1 During the course of his answer, he
2 volunteered information about Dr. Kenneth Warner, who
3 had conducted another type or tried to conduct another
4 type of survey and published another article dealing
5 with SAB members of CTR, not this survey. That is not
6 something Dr. Cummings was at all involved in.

7 I didn't open the door. He volunteered that
8 information. I don't think he should be permitted to
9 bootstrap onto a volunteered answer, to get into a
10 publication that was just pure hearsay.

11 MR. ROSENBLATT: I just remember the fact
12 that it, you know, came up.

13 THE COURT: Let's get away from it. I think
14 he's right.

15 MR. ROSENBLATT: All right. I'll bring
16 Warner on rebuttal. You may prefer I do it this way.

17 MR. MOODHE: I'll take Warner on any time.

18 (The sidebar conference was concluded, and
19 the following proceedings were held in open court:)

20 BY MR. ROSENBLATT:

21 Q. Oh, by the way, Dr. Cummings, now, obviously,
22 the letter is signed by a college intern, Amy Gingrass.

23 Did your superiors at the Roswell Park Cancer
24 Institute have to review and okay this letter before it
25 went out?

1 A. Yes. Just as I mentioned yesterday, it went
2 through our scientific advisory group, as well as our
3 committee that meets on human subjects' protection. So
4 you basically do a scientific review to make sure the
5 work that is being done is not going to be wasting
6 somebody's time.

7 Q. The Frank Statement, in terms of the --
8 mentioning, now, the Tobacco Industry Research
9 Committee, which is mentioned in The Frank Statement,
10 subsequently the name was changed; it became the
11 Council for Tobacco Research; is that correct?

12 A. That's correct.

13 Q. Okay. Now, the first sentence begins by
14 saying: Recent reports on experiments with mice have
15 given wide publicity to a theory that cigarette smoking
16 is in some way linked with lung cancer in human beings.

17 Then we go over here to the second column:

18 We are pledging aid and assistance to the research
19 effort into all phases of tobacco use and health.

20 And number 2: For this purpose, we are
21 establishing a joint industry group consisting
22 initially of the undersigned. This group will be known
23 as the Tobacco Industry Research Committee.

24 Based on your review and evaluation of the
25 research that has been funded by the Council for

1 Tobacco Research, over the years, has this promise made
2 by the tobacco companies' signatories in 1954, has this
3 promise been kept to the American people?

4 A. No.

5 MR. ROSENBLATT: Thank you, Dr. Cummings. Go
6 catch your plane. And good luck, because it's tight.

7 THE COURT: Thank you, Doctor.

8 MR. HEIM: Judge, we wanted to keep --

9 MR. ROSENBLATT: That's right.

10 THE COURT: Oh, yes. Yes. Well, you may
11 miss the plane.

12 MR. HEIM: We'll still try to get you to your
13 plane.

14 THE COURT: Yes. We'll get there.

15 MR. ROSENBLATT: It's time for a break.

16 THE COURT: We'll take a recess at this point
17 as far as you folks are concerned.

18 JUROR 866: Your Honor, could we have the
19 name of the first attorney that cross-examined and the
20 organization that he belongs to? He didn't give that
21 information yesterday.

22 THE COURT: I'm sorry.

23 MR. NEWSOM: I'm Jim Newsom. I represent
24 Lorillard.

25 JUROR 866: Jim?

1 tell us what great culture we have, and they're going
2 to help us promote it.

3 >>: It's a neat promotion. It survives by
4 itself. But they need to advertise their products, and
5 that's all they care about. They don't care about our
6 culture. They never have; they never will.

7 (Musical commercial.)

8 >>: Without a doubt, the most important
9 market for the tobacco industry is children. If you've
10 reached your 18th birthday in this country and you
11 haven't started to smoke, you only have about ten
12 percent chance of ever doing so.

13 DOC's research has found that even small
14 children can recognize the cartoon logos and cigarette
15 advertisements as quickly as they can Mickey Mouse.

16 The tobacco companies say they don't want
17 kids to smoke. In fact, they insist on it. They take
18 out advertisements with slogans saying: We don't think
19 they should smoke. It's the law. R.J. Reynolds
20 Tobacco Company.

21 This is the same industry that says smoking
22 doesn't cause lung cancer, isn't connected to heart
23 disease and emphysema, and couldn't even cause a cough.
24 We, at DOC, feel it's important to document what else
25 they are doing.

1 I think it's important to take a look, too,
2 at such specimens as the Winston Cup racing cards. Not
3 many adults collect these.

4 Mattel Hot Wheels Marlboro racing car with
5 extra Marlboro decals. A Virginia Slims T-shirt for
6 your baby.

7 Or how about these cigarettes: Marlboro
8 Class A filter cigarettes, or Marlboro bubble gum magic
9 color cigarettes.

10 Naturally, tobacco companies claim they don't
11 aim their advertising at children or teenagers. They
12 blame parents and peer pressure for teenage smoking,
13 and they've even created a booklet to help parents
14 emphasize that smoking is only for grown-ups.

15 What better way to get a kid to do something
16 then to tell him he's not old enough or mature enough
17 to do it now?

18 Despite their denials, the tobacco industry
19 reaches children in nearly every activity they like to
20 do. None is more important than sports.

21 No tour of Houston would be complete without
22 a visit to the Astrodome, in this case for the Camel
23 Mud and Monstros series. The tobacco companies like to
24 say that peer pressure is what causes kids to smoke,
25 but as you can see, peer pressure can be bought and

1 paid for right here at the Astrodome.

2 Sports and cigarettes. The connection is not
3 new. It goes back more than a century. It used to be
4 that tobacco companies would sponsor athletes, or maybe
5 even an entire team, but today they sponsor entire
6 events, and even sports facilities like this Camel GT
7 Auto Race at Laguna Seca, California.

8 You can get all sorts of souvenirs: your
9 racing program, a T-shirt for the kids, and a Camel
10 drinking cup, which has your very own Camel
11 endotracheal tube for those we're going to have to do
12 tracheostomies on.

13 But the tobacco companies don't just reach
14 youngsters out at the events themselves; they also do
15 it through television. That's right. The main reason
16 why tobacco companies sponsor sports events is to
17 remain on TV, even though it's been illegal to
18 advertise cigarette brand names since 1971.

19 Let's take a look.

20 (Racing program shown within the video.)

21 >>: What's so sad and so amazing is that
22 this is totally illegal. Yet, the U.S. Justice
23 Department has never enforced the ban on tobacco
24 advertising on television. Do you think it's because
25 of the millions of dollars our Republican and

1 Democratic leaders receive from the tobacco industry?

2 So what can be done to involve everyone in
3 counteracting the major preventable cause of death and
4 disease in our time?

5 Well, in 1977, after founding DOC, I was
6 joined by two family physicians, Dr. Rick Richard and
7 Dr. Tom Houston. Our aim: To tap the highest possible
8 level of commitment of every health professional in
9 counteracting the tobacco pandemic, and also to tap the
10 highest level of creativity of every young person. We
11 developed a multilayered positive health strategy:
12 clinic, classroom and community.

13 Obviously, in the clinic, we need to talk to
14 patients about the costly ripoff cigarettes really are.
15 But it's not just the people who smoke, it's their
16 families as well that we can reach, perhaps by giving a
17 prescription that says, smoking stinks, to a child to
18 give to the parent.

19 My favorite line was the 11-year-old who
20 said to his mother every time his father lit up:
21 Mommy, are you going to get married again after daddy
22 dies?

23 It needs to start small. Perhaps in the
24 waiting room, or in the school library, or even 30,000
25 feet in the air.

1 The other day I was on Continental Airlines.
2 I borrowed a couple of these to show you. As you can
3 predict, there's always going to be a different front
4 cover and the same old story on the back.

5 We take out one of our stickers, which we've
6 developed with a Marlboro Man and a slash going through
7 him. They say: Many of the ads in this publication
8 are misleading, deceptive and a ripoff. We take that,
9 we open it up, slap it right on the cover. Put it
10 right back where you found it for the next person who
11 comes along.

12 Outside of their clinics and medical schools,
13 mild-mannered DOC members have reached millions of
14 school children through their Super Health 2,000
15 Program. Any physician or other health professional
16 can adopt a class or an entire school to help young
17 people see through cigarette advertising and turn the
18 tables on Madison Avenue.

19 It's important, though, to move away from
20 traditional scare tactics and, instead, get young
21 people to laugh the pushers out of town. DOC does this
22 through ridicule of cigarette advertising images and
23 brand names.

24 DOC has tried to get its message out by
25 purchasing advertising space in the mass media, not

1 through generic healthy public service ads like: We're
2 fighting for your life. The tobacco companies come
3 along and say: We offer you more.

4 We've tried to get up alongside ads like,
5 Country Fresh Salem, but when the billboard companies
6 wouldn't sell us space, we bought bus benches and
7 welcomed people to the taste of Country Fresh Arsenic.

8 In the 1970's a brand called Arctic Lights
9 was introduced, so DOC's response was to invite people
10 to discover arctic lungs, guaranteed to make you cool as
11 a corpse.

12 We've also produced posters by working with
13 artists to tap the highest level of creativity of
14 children. The Marlboro cowboy is probably the most
15 successful advertising campaign ever, one that has been
16 responsible for millions of deaths.

17 So DOC and artist Doug Minker, working with
18 school children in Berkeley, California, came up with a
19 more honest depiction of a smoking cowboy: The
20 Marlboro Man, a guy that throws up into his cowboy hat.

21 The idea behind DOC's ad is to get people
22 laughing at advertizing efforts to get people to smoke.
23 And as with all of these ideas, we need to get them out
24 in the community. Image for image, we need to fight
25 Madison Avenue's promotion of cigarettes. It's only

1 when young people begin to see through these images,
2 that we will truly begin to end the tobacco pandemic.
3 That's why DOC sponsors community and sporting events,
4 like the Emphysema Slims Tennis Tournament with Martina
5 No-Smokinova.

6 (Commercial.)

7 We do the same things as the tobacco
8 industry, only with the opposite aim. We destroy the
9 ad images as an integral part of community-based
10 preventive medicine.

11 And sometimes we simply can't let tobacco
12 companies in our communities go unchallenged, which is
13 why DOC makes house calls at many tobacco-sponsored
14 sporting and cultural events. These house calls
15 generate media coverage and serve to embarrass both the
16 tobacco companies and the local groups taking their
17 money.

18 >>: Look what chewing tobacco does to you.

19 >>: We'd just appreciate it -- we have

20 plenty of room --

21 >>: We're not doing any demonstrating right
22 now. We're done. We did what we had to do there.

23 >>: Great.

24 >>: Do you guys take any responsibility for
25 what you're doing, allowing these people to come in the

1 door like that?

2 >>: Sure, we do. In fact, Copenhagen used
3 to sample here. We don't do that.

4 >>: Why not? Why not sample?

5 >>: We've asked them not to do that.

6 >:: Why shouldn't you allow them to sample?

7 >>: Stop this right now. I'm with the rodeo
8 association. We'd like you to go outside, and we'll
9 provide a place for you to do that, and we're going to
10 take you out of here in a nice way.

11 >>: Fine.

12 >>: We're not going to listen to you
13 anymore.

14 >>: Perhaps protests are a little
15 uncomfortable for some, but they bring results.

16 Gradually these house calls are raising
17 public awareness and laying the foundation to throw
18 tobacco out of sports.

19 DOC has been encouraging health professionals
20 and community leaders, alike, around the world, to move
21 beyond pamphlets, posters and preaching, to counteract
22 the use and promotion of tobacco. Whether it be in the
23 clinic, classroom or community, all health
24 professionals, students, teachers and businessmen and
25 women need to be involved.

[1] the smoke, whichever form it takes, you are testing
[2] its use in the cigarette as intended.

[3] Q Now, are you saying those that don't have
[4] low vapor pressure, all of those new ingredients are
[5] tested are added to a regular cigarette and then
[6] tested with inhalation studies?

[7] A No. I was giving you an example of one of
[8] the kinds of details that you would have to consider
[9] in making sure that you are doing appropriate testing.

[10] Q Well, how often are inhalation studies done
[11] on these new ingredients that don't have low vapor
[12] pressure that involve inhalation study of adding that
[13] new ingredient to a regular cigarette?

[14] A Well, part of that is a function of how many
[15] new ingredients are being reviewed. But many, almost
[16] all of the high use items, the ones that don't have a
[17] low vapor pressure have inhalation studies done on
[18] them.

[19] Q The inhalation studies that are done - let
[20] me back up. You said ones that don't have low vapor
[21] pressures, those do have inhalation studies done?

[22] A Yeah. That's the ones you are asking about,
[23] the ones that don't have low vapor pressure.

[24] Q You said almost all of those do?

[25] A That's right.

[1] marketplace in tar delivery.

[2] Q But the Reference cigarette has almost all
[3] of the additives removed from it, doesn't it?

[4] A Yes. That's a very important feature of it,
[5] because that allows you to clearly be able to tell the
[6] difference between the Reference cigarette without
[7] your test additive and with your test additive. If
[8] you had a lot of additives in the cigarette already,
[9] it would be more difficult to see what if any additive
[10] that you are testing is contributing.

[11] Q But that totally fails the test to any
[12] possible synergistic effect with all the other
[13] additives in cigarettes, correct?

[14] A It intentionally makes it possible to
[15] evaluate that ingredient and see what if anything that
[16] ingredient does to cigarette smoke, because with
[17] anything else in there, it just complicates the study
[18] so that you could not determine whether that
[19] ingredient is acceptable or not.

[20] And yes, that's correct, it therefore does
[21] not look at synergies. And as I mentioned to you
[22] before, that is exactly the kind of approach that is
[23] taken with food additives, where if you are testing a
[24] food administrative, you put it in the animal's food,
[25] and the laboratory rats would be eating it, but they

[1] Q How do you decide which ones don't?

[2] A As I said, it's a function of knowing what's
[3] in the literature, and what's known about the
[4] compound, and sometimes preliminary testing to further
[5] characterize the identity of the compound on how it
[6] performs when it's pyrolyzed. And if you are lacking
[7] information, you would need to go on to advanced
[8] testing. If they used at low levels, they would need
[9] less testing than if they used at high levels. That
[10] would be the case, as I said, in the food industry as
[11] well.

[12] Q Those that have inhalation studies done,
[13] exactly how is that accomplished?

[14] A Well, basically a typical inhalation
[15] exposure, the ingredient is put on a cigarette. The
[16] test cigarettes are smoked according to standardized
[17] FTC conditions, and the smoke atmosphere is exposed to
[18] laboratory rats.

[19] Q So you said the ingredient is put on test
[20] cigarettes?

[21] A Yes.

[22] Q What is a test cigarette?

[23] A Well, the most common one used these days is
[24] a University of Kentucky Reference cigarette called a
[25] 1R4F, which represents about the middle of the US

[1] would be in their basic food with limited additives,
[2] as limited as possible, with only that one test
[3] additive being included.

[4] Q So actually, to your knowledge, Philip
[5] Morris never actually tests the synergistic
[6] interaction that may occur with the additives that are
[7] already in cigarettes and the new ingredient, correct?

[8] A No. That is not correct. We have some data
[9] that has numerous ingredients in it. But I think the
[10] key point on the typical testing is that if you want
[11] information about a given ingredient as to whether
[12] it's acceptable or not, you have to test it alone.

[13] Q So the vast majority of the tests on new
[14] ingredients are just testing the new ingredient by
[15] adding it to a Reference cigarette that has most of
[16] the additives removed, correct?

[17] A That is correct.

[18] Q What percentage of the time do you actually
[19] do tests on the new ingredient using a cigarette with
[20] all the additives that are actually in commercial
[21] cigarettes?

[22] A Almost never. As I said, we have some data
[23] with combinations of ingredients, but the routine
[24] large majority of the time, we are trying to do a
[25] thorough review of an individual ingredient as to its

[1] Q So in order to know whether or not those are
[2] active ingredients that require extensive testing, the
[3] only way you can really know that is you have to test
[4] them on the actual product, correct?

[5] MR. BHATIA: Object to the form.

[6] A No. I think we are stumbling over
[7] terminology. In drug development, the term active
[8] ingredient means specifically the chemical that is in
[9] there to have the effect the drug is supposed to have.
[10] So if you are talking about an aspirin, the active
[11] ingredient is acetylsalicylic acid.

[12] Q Are there any drugs other than cigarettes
[13] that are legally sold that result in the death of
[14] thousands of people each year?

[15] MR. BHATIA: Object to the form.

[16] A I have a problem with your saying drugs
[17] other than cigarettes which implies that drugs are
[18] cigarettes or cigarettes are drugs, excuse me, and
[19] they are not.

[20] Q Well, assuming cigarette are drugs, in this
[21] hypothetical, assuming cigarettes are drugs, are there
[22] any other drugs legally on the market that result in
[23] the death of hundreds of thousands of people each
[24] year?

[25] MR. BHATIA: Object to the form.

[1] Q And if those hypotheticals, assuming those
[2] hypotheticals are true - I know you don't assume
[3] that - but assuming they are true for purposes of
[4] this question - the testing procedures for new any
[5] new ingredient for that product would have to be more
[6] stringent than any other drug product, legal drug
[7] product, correct? Assuming hypothetically that
[8] cigarettes are a drug, a legal product that's a drug
[9] that causes the death of hundreds of thousands of
[10] Americans each year, assuming that hypothetically if
[11] that is right, would it then be necessary to test any
[12] new ingredient added to that particular drug in a more
[13] stringent manner than tests for any other legal drug
[14] in the United States, correct?

[15] MR. BHATIA: Object to the form of the
[16] question.

[17] A To your question regarding the testing of
[18] the ingredients of cigarettes, my answer would be no,
[19] that is not correct. The kinds of things that you
[20] consider when you are testing an ingredient such as a
[21] flavor are how is it going to be used, what level is
[22] it going to be used at. Those are the kinds of
[23] factors that determine what type of testing you need
[24] to do.

[25] So if you are going to use it in a food and

[1] A I don't know the entire US listing, assuming
[2] you are talking about just the United States, of drugs
[3] that are available, so I can't tell you for sure. But
[4] if you are asking are there drugs that are sold that
[5] kill 400,000 people a year in the United States, I
[6] don't believe that would be the case.

[7] Q So to the extent hypothetically that
[8] cigarettes are a drug that do kill hundreds of
[9] thousands of people in the United States each year,
[10] cigarettes to that extent, if they are a drug, would
[11] be a unique drug, correct?

[12] MR. BHATIA: Object to the form.

[13] A That was very hard to follow. Could you
[14] repeat it, please.

[15] Q Well, hypothetically if cigarettes are a
[16] drug, and if hypothetically cigarettes do result in
[17] the death of hundreds of thousands of Americans each
[18] year, cigarettes would, in fact, be a unique drug; is
[19] that correct?

[20] MR. BHATIA: Same objection. Object to the
[21] form.

[22] A It would seem so with those hypotheticals.
[23] but again, as I said, in your preceding question, I
[24] wasn't totally knowledgeable of everything that's
[25] available.

[1] it's going to be used at one part per million, then
[2] you would test it at a fairly low level and for very
[3] limited testing. On the other hand, if it's going to
[4] be used in a cigarette as opposed to a food, you would
[5] not be so much concerned about tests that were
[6] designed by ingestion, although those would be very
[7] useful data, but you would want to have data if you
[8] were designing tests that address the inhalation.

[9] Q Are you talking about that addressing the
[10] inhalation of the ingredient standing alone?

[11] A It depends, again, on the ingredient. As I
[12] told you, when we evaluate ingredients, we start by
[13] searching the literature, knowing exactly what the
[14] ingredients are, and the regulatory status. From that
[15] you learn a lot. And the kind of thing you could
[16] learn that addresses your question might be is this an
[17] ingredient that has such a low vapor pressure that it
[18] will be, if used in a cigarette, it will be in the
[19] smoke exactly as that ingredient, in which case that
[20] is the fact, what is in the smoke.

[21] On the other if it does not have a low vapor
[22] pressure, it might pyrolyze into other compounds, and
[23] so when you use it in a cigarette, it would not be so
[24] much the starting ingredients that you would have.
[25] Nonetheless, if you put it on a cigarette and you test

- [1] Q And what happened during that conversation?
- [2] MR. BHATIA: I'm going to object to any
- [3] attorney discussions. So if there's a substance
- [4] of an attorney-client communication, please don't
- [5] disclose it and maintain the privilege.
- [6] Q In other words at the time you first
- [7] received the call and you had never spoken to her --
- [8] well, had you ever spoken to Cynthia Hughes Kuntz by
- [9] the time she called you about whether you would be a
- [10] witness?
- [11] A Prior to the time she called me to be a
- [12] witness in this case?
- [13] Q Yes.
- [14] A Yes.
- [15] Q She had spoken to you prior to that?
- [16] A Yes.
- [17] Q About things other than being a witness in
- [18] any case?
- [19] A No. It was always about being a witness in
- [20] a case.
- [21] Q Was it always about being a witness in the
- [22] Engle case?
- [23] A No.
- [24] Q So you had prior discussions about the
- [25] possibility of being a witness in other cases prior to

- [1] of any other case where you are listed as a witness?
- [2] A As I said, I wasn't sure that I was still
- [3] listed as a witness in any case, maybe I am. So no, I
- [4] cannot recall.
- [5] Q When you say still, what cases did you at
- [6] one time believe you were a witness?
- [7] A Well, there were -- huh. I guess I'm not --
- [8] it's hard for me to answer, because I'm not sure what
- [9] listed as a witness means as compared to -- the way I
- [10] always looked at it was I was told that I would
- [11] probably would have to be deposed. I'm assuming that
- [12] means listed as a witness.
- [13] MR. BHATIA: John, I think maybe the
- [14] confusion is that he's talking about being called
- [15] for deposition and the deposition canceling as
- [16] opposed to being listed as a potential witness
- [17] for trial. Maybe you guys are talking about two
- [18] different things.
- [19] A I apologize. I'm not comfortable with the
- [20] terminology.
- [21] Q You understand that you would have to be
- [22] listed as a witness before you would be deposed; do
- [23] you understand that?
- [24] A Okay. I do now.
- [25] MR. BHATIA: I'm not sure that's right. I

- [1] being contacted to being a witness in Engle; is that
- [2] correct?
- [3] A Yes, sir.
- [4] MR. BHATIA: I think he is listed in other
- [5] cases, John. He is on the witness list in other
- [6] cases.
- [7] MR. HOAG: I guess he doesn't know that.
- [8] Q Before the attorney just told you that he
- [9] thinks you are a witness in other cases, did you know
- [10] you were?
- [11] A I've been called -- I honestly can say I
- [12] don't keep track, but I have been called to be a
- [13] witnesses in some cases and that has fallen through,
- [14] and I'm told which ones, and it comes to pass and it
- [15] doesn't. When the day comes for the deposition as it
- [16] has today, I get deposed. If I'm a witness, I may
- [17] have been told and I just haven't bothered to keep
- [18] track of it.
- [19] Q Approximately when were you first contacted
- [20] about the possibility of being a witness in any
- [21] tobacco case?
- [22] A Oh gosh, sometime in the last -- I'm going
- [23] to really guess and say six months, four to six
- [24] months. I'm not really sure.
- [25] Q Other than Engle can you think of the name

- [1] think you can depose whoever you want, where they
- [2] are listed as witnesses or not, but go ahead.
- [3] MR. HOAG: You mean we can depose any of
- [4] your people right now?
- [5] MR. BHATIA: Unless Florida has some
- [6] different rule.
- [7] Q Well, you had depositions scheduled and then
- [8] canceled; is that correct?
- [9] A Yes, that's correct.
- [10] Q What cases?
- [11] A I believe one was New York, and I can't
- [12] remember what the name of the case was. And there was
- [13] one other -- there might have been two others, but I
- [14] honestly don't remember the names of them.
- [15] Q Do you know why those depositions were
- [16] canceled?
- [17] A No, I don't.
- [18] Q Who canceled them?
- [19] A I don't know. I would get a call telling me
- [20] that I was going to be deposed and then have it
- [21] canceled. I don't know who made the decisions.
- [22] Q Now, there is a thing called Fact Witness
- [23] Designations of Defendant Philip Morris Incorporated.
- [24] Have you seen that, your fact witness designation?
- [25] A I'm not sure what that is.

Page 25

[1] A Not in an absolute sense judging it by --
[2] having learned about science and become a Ph.D. since
[3] I was 20 and becoming a veterinarian since I was 20,
[4] and knowing something about science and literature,
[5] against that standard, no, there was never a time in
[6] my life I knew.

[7] Now, if you want to say against a layman's
[8] standard of did I read something that told me it was
[9] true and I just accepted it because I was told it,
[10] yes, you'd read warning packs and whatnot, and the
[11] warning labels say various things about what it
[12] causes, and as a layman you would say, okay, well it
[13] says it causes this, and so it does.

[14] Q So you did accept that, and you do accept
[15] the warning label that says cigarette smoking causes
[16] lung cancer, heart disease, and emphysema?

[17] A I did accept that at that time, that's
[18] right.

[19] Q At what point did you accept that?

[20] A As I said, prior to getting involved in
[21] the -- well, advanced medical and scientific training
[22] where I could critically review it, up until that
[23] point.

[24] Q About what year would that have been?

[25] A Well, I guess, as I said before, I went to

Page 26

[1] Cornell for veterinary medicine from 1973 to 1977, so I
[2] would have been around that time I would have been
[3] learning enough to be able to critically review it,
[4] and even more so during my Ph.D. from '83 to '86.

[5] Q So are you saying prior to 1973 you had
[6] accepted whatever was on the warning label of the
[7] cigarette package as being accurate.

[8] A Can you repeat the question.

[9] Q Are you saying that prior to 1973, you had
[10] accepted whatever was on the warning label of a
[11] cigarette package as being accurate?

[12] A Yes.

[13] Q But after 1973 you did not accept it as
[14] being accurate?

[15] A Well, I don't know when after I started my
[16] education. I said -- yes, I don't know when after I
[17] started my education. As I said, during that
[18] education process, and it was from '73 to '77 and '83
[19] to '86, plus all my involvement working in those
[20] areas, somewhere along that line, but I can't tell you
[21] exactly when.

[22] Q Do you know what was on the cigarette label
[23] in 1972?

[24] A I'm not sure whether it was on the cigarette
[25] pack or newspaper articles or whether it was on

Page 27

[1] advertising or where I read it, but it was clearly
[2] information that was provided in some form.

[3] Q So were you familiar at all with the 1964
[4] Attorney General's report on smoking and health?

[5] MR. BHATIA: You mean you mean the Surgeon
[6] General's Report?

[7] Q Surgeon General's report on smoking and
[8] health?

[9] A Specifically that document, no. If you mean
[10] by familiar had I read any of it, no.

[11] Q And as we sit here today have you ever read
[12] any of it?

[13] A Bits and pieces of it, yes.

[14] Q Do you recall whether you read any newspaper
[15] reports about the 1964 Surgeon General's report?

[16] A I honestly can't say that I remember 20 or
[17] 30 years ago whether I recall reading something about
[18] the report. It wouldn't surprise me if I had, but I
[19] can't recall it.

[20] Q One of the conclusions of that report is
[21] that cigarette smoking causes lung cancer, right?

[22] A Yes.

[23] Q As we sit here today, you disagree with that
[24] time conclusion, correct?

[25] A That's correct, although I accept the fact

Page 28

[1] that it is a risk factor.

[2] Q Did you switch or did you decide to smoke a
[3] pipe because of concerns about the health consequences
[4] of smoking cigarettes?

[5] A No. As I told you, I chose to smoke a pipe
[6] because the taste of the smoke is much sweeter and the
[7] handling of the pipe and the different finishes of the
[8] wood is what I like. In fact, I went through a whole
[9] lot of pipe tobaccos to find the one that I really
[10] liked the taste of, and I tended towards the more
[11] sweeter of all the pipe tobaccos.

[12] Q Now, you told me that you have known for a
[13] few weeks that you have been listed as a witness in
[14] the Engle case, correct?

[15] A Yes.

[16] Q Do you know whether you are listed as a
[17] witness in any other cases?

[18] A I don't think so.

[19] Q How did you come to find out you were a
[20] witness in the Engle case?

[21] A I was called by an attorney.

[22] Q Who?

[23] A I believe it was Cynthia Hughes Kuntz.

[24] Q Who does she work for?

[25] A Shook, Hardy & Bacon.

PM3003572335

<p>Page 21</p> <p>[1] your opinion has any one of those people ever died</p> <p>[2] prematurely as a result of having smoked and inhaled</p> <p>[3] cigarettes into their lungs?</p> <p>[4] A Two things. One is, I — again, it doesn't</p> <p>[5] matter that it's not a particular individual, I still</p> <p>[6] really don't know. But also, it's, you know, when it</p> <p>[7] comes to my technical responsibilities, they have to</p> <p>[8] do with evaluating changes in cigarette designs and</p> <p>[9] additives to ingredients, and I can't tell you that I</p> <p>[10] have followed all that literature closely.</p> <p>[11] Q When you say that literature, what</p> <p>[12] literature are you referring to?</p> <p>[13] A Well, you were asking about people dying</p> <p>[14] from smoking, and I assume you are talking about</p> <p>[15] epidemiology and that kind of thing. Clearly it's not</p> <p>[16] literature that has to do with evaluation of cigarette</p> <p>[17] designs and ingredients.</p> <p>[18] Q Have you ever read any newspaper articles,</p> <p>[19] magazine articles, or anything in the media concerning</p> <p>[20] cigarette smoke and health?</p> <p>[21] A Yes.</p> <p>[22] Q Based on everything you have ever read or</p> <p>[23] seen and all the information you've accumulated during</p> <p>[24] the time you had your Ph.D, and all the information</p> <p>[25] you've accumulated since you worked for Philip Morris,</p>	<p>Page 22</p> <p>[1] do you have an opinion as to whether or not cigarette</p> <p>[2] smoking causes any disease?</p> <p>[3] A Yes. I very much believe that cigarette</p> <p>[4] smoking has been well shown to be a risk factor for</p> <p>[5] heart disease, for lung cancer, for some other</p> <p>[6] diseases. But to say — your question was is there</p> <p>[7] data to show that it causes it, and I think one of the</p> <p>[8] typical pieces of data that is usually used to prove</p> <p>[9] cause and effect is some reproducible animal studies,</p> <p>[10] and those I have not yet seen to exist.</p> <p>[11] Q So what is your opinion as the whether or</p> <p>[12] not cigarette smoking causes any disease?</p> <p>[13] A That clearly is a risk factor, but the</p> <p>[14] scientific data is not complete enough to make an</p> <p>[15] absolute statement that there's a cause and effect</p> <p>[16] relationship.</p> <p>[17] Q Is it more likely than not that cigarette</p> <p>[18] smoking causes cancer in your opinion?</p> <p>[19] A Is it more likely than not?</p> <p>[20] Q That cigarette smoking causes lung cancer?</p> <p>[21] A Well, I guess that comes back again, I</p> <p>[22] guess, to the fact that it is a risk factor, and</p> <p>[23] epidemiological has shown to be a risk factor for lung</p> <p>[24] cancer. So the numbers on those are higher than not</p> <p>[25] smoking.</p>
<p>Page 23</p> <p>[1] Q Risk factor and cause, are those the same</p> <p>[2] thing to you?</p> <p>[3] A No.</p> <p>[4] Q I didn't ask you about risk factor. I asked</p> <p>[5] you in your opinion is it more likely than not that</p> <p>[6] cigarette smoking causes lung cancer?</p> <p>[7] A I understand that you used the word "cause."</p> <p>[8] The way I was interpreting is you said more likely</p> <p>[9] than not, and that to me is more talking about the</p> <p>[10] risk, not just the word cause alone. If you want to</p> <p>[11] change the question to does it cause it, then I guess</p> <p>[12] I would repeat my other answer that I think cause and</p> <p>[13] effect, yeah, has not absolutely been proven, because</p> <p>[14] there's a lack of reproducible definitive animal</p> <p>[15] studies.</p> <p>[16] Q You personally don't know whether or not</p> <p>[17] cigarette smoking causes lung cancer; is that correct?</p> <p>[18] A This is personally or as a scientist?</p> <p>[19] Q Personally. You personally do not know</p> <p>[20] whether cigarette smoking causes lung cancer, correct?</p> <p>[21] A That's correct. I cannot make that absolute</p> <p>[22] statement that it is a cause.</p> <p>[23] Q And as a scientist you do not know whether</p> <p>[24] or not cigarette smoking causes lung cancer, correct?</p> <p>[25] A That's correct. I cannot make an absolute</p>	<p>Page 24</p> <p>[1] statement that it is a cause.</p> <p>[2] Q And personally you don't know whether or not</p> <p>[3] cigarette smoking causes any disease; is that correct?</p> <p>[4] A That's broader, and I would have to just say</p> <p>[5] that since I don't review all that literature, I can't</p> <p>[6] say that I'm knowledgeable enough about all of it to</p> <p>[7] say absolutely. But as far as what I have seen,</p> <p>[8] without making an effort to look at it all, I would</p> <p>[9] have to give you the same answer, that's correct.</p> <p>[10] Q As a scientist you don't know whether or not</p> <p>[11] cigarette smoking causes any disease, correct?</p> <p>[12] A No. Was that the same question as the one</p> <p>[13] before?</p> <p>[14] Q One was personally. Now I'm asking you as a</p> <p>[15] scientist you don't know whether cigarette smoking</p> <p>[16] causes any disease?</p> <p>[17] A Right, same answer.</p> <p>[18] Q Has there ever been a time in your life that</p> <p>[19] you knew whether or not cigarette smoking caused any</p> <p>[20] disease?</p> <p>[21] A This is a — has there ever been a time in</p> <p>[22] my life that I knew?</p> <p>[23] Q Right. Did you know when you were 20 or 30?</p> <p>[24] Was there ever a time when you knew cigarette smoking</p> <p>[25] causes any disease?</p>

PM3003572336

- [1] think that the typical interpretation would be the
- [2] risks associated with it as far as heart disease and
- [3] cardiovascular disease.
- [4] Q So by your definition of safer, in your
- [5] opinion is pipe smoking safer than cigarette smoking?
- [6] A I don't know.
- [7] Q In your opinion is it dangerous to smoke
- [8] cigarettes?
- [9] A Clearly there's a risk factor of several
- [10] diseases related to cigarettes.
- [11] Q So in your opinion is it dangerous to smoke
- [12] cigarettes?
- [13] A In my opinion, my honest opinion is that
- [14] anything in moderation is acceptable.
- [15] Q Are you saying in your opinion that it is
- [16] not dangerous in moderation to smoke cigarettes?
- [17] A Yes.
- [18] Q And what do you call moderation?
- [19] A I don't have a clear definition of
- [20] moderation, but clearly in anything, as I said,
- [21] whether it's how fast you drive a car, or smoking, or
- [22] drinking, you know, moderation of some sort is,
- [23] however that might be interpreted by an individual is
- [24] acceptable.
- [25] Q Would you consider smoking five cigarettes a

- [1] of cigarettes and cigarette smoke, why do you believe
- [2] that moderate smoking is not a dangerous activity for
- [3] the smoker?
- [4] A As you said, I'm a toxicologist, and one of
- [5] the key premises of toxicology is that dose is the key
- [6] factor. So that's a very good parallel, actually, to
- [7] my personal concept of moderation, that anything has
- [8] its level at which it's acceptable.
- [9] Q Anything has a level at which it's
- [10] acceptable; is that what you just said?
- [11] A Yes.
- [12] Q So what leads you to the conclusion that
- [13] there is some safe dose of cigarette smoke that a
- [14] smoker can inhale?
- [15] MR. BHATIA: Objection to the form of the
- [16] question.
- [17] Q What leads you to the conclusion that there
- [18] is some safe dose of cigarette smoke that a smoker can
- [19] inhale?
- [20] MR. BHATIA: Same objection.
- [21] A I didn't make a conclusion that there was
- [22] some safe dose.
- [23] Q In your opinion is there a safe dose of
- [24] cigarette smoke that a smoker can inhale?
- [25] A When we were talking about safe before, I

- [1] day being moderation?
- [2] A Probably yes.
- [3] Q How about about ten cigarettes; would you
- [4] consider smoking ten cigarettes a day to be
- [5] moderation?
- [6] A It's possible.
- [7] Q How about 20 cigarettes?
- [8] A I suppose that now you're in the average,
- [9] and that's also possibly moderation. But I don't put
- [10] a hard number on moderation. I think it's an
- [11] individual choice.
- [12] Q So as long as someone smokes moderately, you
- [13] don't consider smoking to be a dangerous activity,
- [14] correct?
- [15] A Yes.
- [16] Q And what do you base that on?
- [17] A Well, you had asked me my person opinion,
- [18] and that is my personal opinion. It's not a
- [19] scientific one.
- [20] Q Well, you are a toxicologist, right?
- [21] A Yes.
- [22] Q You are very familiar with the contents of
- [23] cigarettes and cigarettes smoke, aren't you?
- [24] A Yes.
- [25] Q Based on your understanding of the contents

- [1] told you that it was a matter of clearly
- [2] characterizing what you meant when you're talking
- [3] about safe, and that it's clear in my mind that
- [4] smoking is risk factor for things such as lung cancer
- [5] and heart disease.
- [6] Q In your opinion does smoking — in the
- [7] entire history of the United States, has smoking ever
- [8] resulted in the premature death of anyone due to
- [9] smoking and inhalation of smoke into the lungs?
- [10] A Could you repeat it.
- [11] Q In your opinion has smoking cigarettes, and
- [12] by that I mean the inhalation of cigarette smoke into
- [13] the lungs, has that activity ever resulted in the
- [14] premature death of anyone?
- [15] A I honestly don't know. The data — there's
- [16] much data — I hate to repeat myself, but I think it's
- [17] the right answer — there is much data, epidemiology
- [18] data that shows that it's clearly a risk factor in
- [19] certain diseases, that's clear. But that data talks
- [20] about populations. You are asking about individuals,
- [21] and I have no way of knowing that.
- [22] Q I'm not talking about a particular
- [23] individual when I asked the question. When I say in
- [24] your opinion, I mean is out of all the people that
- [25] have ever smoked cigarettes in the United States, in

Engle Case: Solana Deposition

Causes

22:2, 7, 12, 18, 20

23 :6 , 17, 20, 24

24:3, 11, 16, 25

25: 12, 13, 15

27: 21

67:9

Engle: Carchman Testimony

PM3003572339

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Page 3639	Page 3641
<p>1 Q. What are the general areas in which Philip Morris's 2 safer cigarette work has fallen? 3 A. I could reduce it to simply four areas; there are 4 others but these are four big areas. One has to do with 5 general reduction, another one is selective reduction, 6 another was a commercial attempt to remove nicotine from 7 the cigarette, and the last area has to do with 8 electrically heated cigarettes. 9 Q. I'm going to put up a cart that we have prepared, and 10 that's the list of areas you have just set forth, is that 11 correct? 12 A. Yes. 13 Q. Before we get to that list, Dr. Carchman, does Philip 14 Morris, and has Philip Morris made any assumptions about 15 whether smoking causes disease as part of its work to 16 develop a safer cigarette? 17 A. Yes. 18 Q. What assumptions has Philip Morris made? 19 A. That it does cause disease. 20 Q. Why does Philip Morris make that assumption? 21 A. There was no way to fruitfully proceed with trying to 22 develop a safer cigarette unless one went in with that kind 23 of assumption. 24 Q. Okay. Now Dr. Carchman, does smoking cigarettes 25 cause disease such as lung cancer?</p>	<p>1 in smoke that may be causing the disease? It could be one 2 thing, it could be could be more than one thing. 3 The second is, if you identify these things, 4 how are they causing this disease? 5 So you have two pieces to this big puzzle. 6 What are the substances and how are they doing it? 7 Q. When you talk about the "how" part of it, is that 8 sometimes referred to by researchers as the mechanism of 9 action? 10 A. Yes. 11 Q. Why is it important to you, as a scientist at a 12 tobacco company, to know what constituents of smoke may be 13 causing disease? 14 A. There are at least two critical reasons for it. 15 One, is if somebody comes in and gets sick, and 16 you think, or somebody thinks that smoking caused that 17 illness, knowing what the constituents are that are 18 responsible for it and the mechanism, helps you, because 19 there is or there are very few diseases, very few. There 20 are some exceptions in terms of infectious diseases, but 21 diseases like lung cancer and cardiovascular disease. 22 Anyway, there is one single cause, there are numerous 23 causes, you have to figure out what's doing what, and you 24 can't do it until you identify what particular 25 constituents and the mechanisms that are involved.</p>
Page 3640	Page 3642
<p>1 A. I think the answer is yes, with an explanation. And 2 the explanation goes the following way. 3 If you, if you equate, as many people do, 4 causation with increased risk, okay? Smoking has been 5 associated with a variety of diseases. These 6 epidemiological studies increased risk, and most people 7 think if it's an increased risk it causes a disease. If 8 you do that then the answer is yes. 9 And I would say for many years, long before I 10 came to Philip Morris, that we have basically agreed that 11 smoking is associated with lung cancer and certain other 12 diseases based on these statistical associations. 13 So, in a sense, that's really not new. 14 But for people and the public health community, 15 they consider causation and increased risk as being the 16 same. And I think from a public health perspective that's 17 fine, that's okay to do. 18 Q. Doctor, from a scientific standpoint, is there 19 anything more that needs to be done to establish causation? 20 A. Yes. 21 Q. What is that? 22 A. There are at least two things that I think are 23 critically important. One, I mean people have been 24 evaluating cigarettes and disease, smoking and disease for 25 decades. See, you have to figure out, what are the things</p>	<p>1 So that's one reason for getting at the 2 scientific piece of this. 3 The second reason is, if we are going to try to 4 develop a safer product, rather than being sort of like 5 the blind man in the room with the elephant groping around 6 looking for what you really can't see, knowing what it is 7 really helps you. If you know what it is, you have a 8 better shot of either reducing the amount or pulling it 9 out. 10 Q. As of today, as you sit here today, do you know of 11 any reputable scientist in the world who claims to know 12 what constituent of smoke causes disease? 13 A. No, I don't. 14 Q. As you sit here today, do you know of any reputable 15 scientist in the world who claims to know the mechanism by 16 which smoke causes disease? 17 A. No, I don't. 18 Q. Has the Surgeon General of the United States, in all 19 the reports that he's issued on smoking and disease, ever 20 identified a specific constituent on the mechanism by which 21 smoke causes disease? 22 A. No, he hasn't. 23 Q. Over the years, has Philip Morris and the other 24 tobacco companies taken a position as to whether the 25 scientific community should continue to look for the</p>

Page 3639 - Page 3642

PM3003572340

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Page 3643

Page 3645

1 mechanism and the constituents that may cause disease?

2 A. Yes, we have.

3 Q. Why?

4 Let me ask you first, what's the position?

5 A. I think the issues are so complex that both
6 government, universities, and industry have to continue to
7 work together to figure out the answers to the questions
8 you have been asking me. What are these constituents? How
9 do they work?

10 And, like I said, this work has been going on
11 for decades. We have made some progress, but we clearly
12 have not gone far enough.

13 Q. Okay. I want to turn back to the work that was done
14 at Philip Morris to develop a safer cigarette. And let me
15 tell you, the first 2 on the chart are things that the jury
16 has heard about before, so I want to focus your answers
17 really on the Philip Morris experience, if you would.

18 The first one on the chart is selective
19 reduction. What do you mean when you talk about selective
20 reduction?

21 A. Selective reduction, in the example given here, is
22 the public health community has identified a number of
23 constituents, and one of them is this stuff or benzopyrene,
24 which was initially considered to be the most potent
25 carcinogen in tobacco smoke, and probably responsible for

1 particulate phase.

2 So when you burn wood or paper you can see
3 particles and you can see smoke. And the benzopyrene was
4 in the particles, so we had no way of reaching into the
5 particles to pull out the benzopyrene and nobody had
6 figured out yet how to really selectively reduce the
7 product of benzopyrene.

8 Q. We won't go through all the selective reduction
9 attempts at Philip Morris, but just in general, did
10 selective reduction appear to be a good way for Philip
11 Morris to remove harmful smoke constituents?

12 A. No.

13 Q. Let's move on. The next on the list, which is
14 general reduction of tar, do you see that?

15 A. Yes.

16 Q. When did Philip Morris start work with the general
17 reduction of tar?

18 A. That started in the 50's as well.

19 Q. And what prompted Philip Morris to start work with
20 the general reduction of tar?

21 A. Well, I think you try not to put all your eggs in one
22 basket. And nobody really knew whether the selected
23 filtration would work or not, so I think they also
24 proceeded along a line of development, trying to reduce a
25 variety of things.

Page 3644

Page 3646

1 lung cancer.

2 And so we try, a number of people tried both
3 inside and outside the industry, to either reduce or
4 eliminate this kind of material selectively.

5 Q. Okay. Does that mean it's an attempt to eliminate
6 just the one constituent?

7 A. Actually, this is a brother or sister of a whole
8 family of compounds, polyaromatic hydrocarbons, this is the
9 one they focus on. If you could attack this one, you could
10 probably take care of the other ones as well.

11 Q. Just to use benzopyrene, when did Philip Morris start
12 work to eliminate benzopyrene?

13 A. In the 50's.

14 Q. And what prompted Philip Morris to that action at
15 that time?

16 A. Was the concern expressed by scientists and public
17 health officials that this was the most potent carcinogen
18 in tobacco smoke.

19 Q. And was Philip Morris able to remove benzopyrene in
20 the 1950's?

21 A. Not selectively.

22 Q. And what difficulties did Philip Morris have
23 effectively removing benzopyrene?

24 A. As you look at tobacco smoke, it exists in at least
25 two forms; one is the gas phase and the other is the

1 Q. Okay. Now, have you supervised the preparation of a
2 chart that summarizes the work done on the -- excuse me,
3 the general reduction of tar?

4 A. Yes, I have.

5 Q. Is that the chart?

6 MR. STRITMATTER: Your Honor, I would object to
7 this demonstrative exhibit. It is not an accurate
8 representation of the facts because it did not take
9 compensation into consideration, what the smoker is
10 actually receiving in tar?

11 THE COURT: Let me ask this. I'll ask that you
12 take the chart down until you ask him the question
13 directly. I think this is one way there would be more of
14 a tendency for the chart to be more leading.

15 MR. LOMBARDE: Okay. I'll ask a few foundation
16 questions.

17 Q. Over the course of time, from the 1950's to the
18 present, Dr. Carchman, what has happened to tar yields of
19 Philip Morris cigarettes?

20 A. They have come down.

21 Q. And how much have they come down, just in a general
22 sense?

23 A. More than 50 percent.

24 Q. And what techniques have been used by Philip Morris
25 to bring the tar yields down?

Page 3643 - Page 3646

PM3003572341

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Page 3647

1 A. Just by way of illustration, filtration, ventilation,
 2 punching holes in the paper, of the cigarette paper, the
 3 use of expanded tobacco, puff tobacco, those are some of
 4 the mechanisms that we in the industry have employed.
 5 Q. And does this chart reflect those, those techniques
 6 and that fall in tar yield?
 7 A. Yes.
 8 MR. LOMBARD: Your Honor, may I put the chart
 9 up?
 10 THE COURT: Yes. And I'll note the objection.
 11 I think your objection goes to weight. It may be a
 12 grounds for cross examination, but it is not a ground to
 13 exclude it.
 14 MR. STRITMATTER: Thank you, your Honor.
 15 THE COURT: I'm sorry.
 16 Q. All right. On the right hand side of the chart there
 17 is a graph; and what does that depict, generally, Dr.
 18 Carchman?
 19 A. This depicts the fall over this period of time in
 20 years of the tar delivery of Philip Morris cigarettes.
 21 Q. And it actually starts from the 19 -- just before
 22 1970, is that right?
 23 A. On this chart here, yes.
 24 Q. Okay. And why is it that the chart begins just
 25 before 1970?

Page 3648

1 A. This has to do with the implementation of the Federal
 2 Trade Commission tests.
 3 Q. And how far did tar levels have fallen to date?
 4 A. So in around 1967, I guess it was close to 21
 5 milligrams, and then today the average is less than 12.
 6 Q. Okay. Now, on the left hand side of the chart are
 7 some of the techniques that you described. And again, the
 8 jury has heard about some of these techniques with respect
 9 to other manufacturers. So just I want you to focus on
 10 Philip Morris. Are those all techniques that Philip Morris
 11 used as well?
 12 A. Yes.
 13 Q. And just a couple of notes related to Philip Morris.
 14 Did Philip Morris make any particular innovations on any of
 15 these techniques?
 16 A. I can use two for illustrative purposes.
 17 Q. Please do?
 18 A. The ventilation described here, Philip Morris
 19 patented a laser perforation procedure for punching holes
 20 in the cigarette paper.
 21 Q. And how was that an innovation?
 22 A. One, it allowed with a greater degree of confidence
 23 that you had the holes going where you wanted them to go
 24 and that you had a consistent kind of perforation.
 25 Q. And what's the second innovation that Philip Morris

Page 3649

1 made?
 2 A. And if we look down here at the expanded tobacco,
 3 Philip Morris patented a process for expanding tobacco.
 4 Q. And what was the process that Philip Morris patented?
 5 A. We call it the DIET process. D-I-E-T. for carbon
 6 dioxide expanded tobacco. They use carbon dioxide to punch
 7 up the tobacco.
 8 Q. Is it also called dry ice expanded tobacco?
 9 A. Yes.
 10 Q. How much money has Philip Morris spent over the years
 11 to bring down the tar levels in its cigarettes?
 12 A. Hundreds of millions of dollars.
 13 Q. Now, the jury has heard some testimony in this case
 14 about whether tar reduction of this nature does a smoker
 15 any good.
 16 Have you studied that question as part of your
 17 work with cancer?
 18 A. Yes, I have.
 19 Q. And do you have an opinion as to whether the lowering
 20 of tar yield has had an effect, positive or negative, on
 21 smokers?
 22 A. I do.
 23 Q. What is your opinion?
 24 A. I've reviewed primarily all of the epidemiology data,
 25 chemistry and biology data, government reports from 1950 up

Page 3650

1 until the present time. The going in concept from the very
 2 beginning was that less is better. And when Professor
 3 Wynder and Professor Graham published the first large study
 4 in the United States in 1950, very quickly the assumption
 5 they were making that the problem, the bad stuff was the
 6 tar. And if you could reduce the amount of tar that the
 7 smoker got by whatever mechanism, you would reduce the risk
 8 for at least lung cancer.
 9 So that set the stage. That principle is an
 10 important principle in pharmacology and toxicology. And
 11 it goes something, the dose is everything. The more you
 12 have in this case, the worst it's going to be. And the
 13 epidemiology data over the years has tended to support
 14 that.
 15 In around the late 60's, Broten and his
 16 associates at Roswell Park and Professor Wynder at Sloan
 17 Kettering basically published two additional key papers
 18 basically showing if you compare smokers of filter
 19 cigarettes with smokers of non-filter cigarettes, there is
 20 a reduction of lung cancer risk. If you smoke the filter
 21 cigarettes.
 22 That very quickly led to a series of meetings
 23 and reports, US surgeon General's reports, very quickly
 24 recommending, the Surgeon General recommending several
 25 times that tar reduction be something that is encouraged

Page 3647 - Page 3650

PM3003572342

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Page 3651

1 and implemented.

2 There was a large National Cancer Institute
3 sponsored study called the Tobacco Working Group trying to
4 advance that kind of observation; even more to come to the
5 future where we are now, because the same kinds of
6 observations that were made 30 years ago are still being
7 made today.

8 In a recent paper, 1998 by Cutter and
9 Associates in the Journal of Lung Cancer, looking at the
10 subjects in the Philadelphia, Pennsylvania area, comparing
11 filter to non-filter smokers, and if you look at the
12 difference in tar delivery between filter and non-filter,
13 non-filter has a higher tar delivery. Basically they
14 found a 54 percent reduction in lung cancer risk, so
15 that's the science.

16 In 1998 --

17 Q. Let me interrupt you for just a second, doctor, and
18 ask you, is there a particular type of study that you
19 consider more useful than others in evaluating the effect
20 of low yield cigarettes?

21 A. The only thing that's available now were these
22 epidemiological studies. And because they capture
23 everything, they capture the real world, they capture how
24 people smoke, how much they smoke, and they look at it over
25 a very long, a very long period of time. They look at

Page 3652

1 different kinds of people from different parts of the country,
2 different ethnic backgrounds, different kinds of occupations,
3 whether they drink, whether they exercise, whether they are
4 Japanese, whether they are American, Asian Americans, whatever,
5 you have an ability to look across a wide spectrum of
6 demographics and get some answers. That is really the only way
7 that we have available to us today to address that question.

8 Q. Now epidemiological studies, you said, have been
9 performed over the past 30 years or so. What type of
10 diseases have these studies tracked?

11 A. Well, with smoking, lung cancer has been the
12 principal one, though there have been many large studies on
13 cardiovascular disease, other kinds of cancers and
14 respiratory diseases other than lung cancer. And just as
15 an example --

16 Q. Now you mentioned the United States Surgeon General
17 and his comments about low yield cigarettes. Have other
18 governments made comments about low yield cigarettes?

19 A. The US Surgeon General has done this numerous times
20 in their reports.

21 In 1998, last year, the Department of Health in
22 the United Kingdom basically issued a report asking for
23 low yield cigarettes in terms of disease, risk reduction.
24 The New Zealand Department of Health has just issued a
25 similar report, and Richard Tito, whose a tobacco control

Page 3653

1 public health official epidemiologist, last year basically
2 said he believes we should be introducing American blended
3 low yield cigarettes into the rest of the world. He was
4 talking about the developing countries.

5 Q. Are you familiar with allegations relating to smoker
6 compensation. You have heard an objection about one
7 recently?

8 A. Yes.

9 Q. Just to remind the jury what is smoker compensation
10 and what is the allegation as it relates to low yield
11 cigarettes?

12 A. For, first of all, the compensation question is an
13 old question. In the time that I've been allowed life and
14 reading about science, they have been talking about
15 compensation for at least that period of time. And it has
16 to do with how people smoke the cigarette, how many
17 cigarettes they smoke, how many puffs per cigarette they
18 take, how deeply they inhale, the size of the puff, all of
19 these things have been talked about for more than, for more
20 than 30, for more than 30 years.

21 Q. Okay. Now, do epidemiological studies take into
22 account in any way the possibility of smoker compensation?

23 A. That's one of the reasons why I think today it's the
24 best kind of study, because it was nestled within it, how
25 people use the product. And in fact, in 1996 in the

Page 3654

1 Federal Trade Commission monograph number 7, sponsored by
2 the National Cancer Institute, Jonathan Sammet, one of the
3 expert epidemiologic experts in the world on lung cancer,
4 made that same conclusion.

5 Q. So if compensation does in fact occur, are these
6 epidemiological studies still valid in terms of their
7 assessment of the risk of low tar cigarettes?

8 A. Yes, and if I could just say a word.

9 Q. Please?

10 A. I've looked at over the 30 years where you had tar
11 deliveries in the 30 milligrams to where you have them down
12 today in the 11 milligram range, and compared the studies
13 in the these Eppy studies, with respect to the comparisons
14 made between filter, non-filter, high tar or low tar, the
15 risk reduction that's been seen over this 30 year period
16 has not diminished in any way.

17 Q. Okay, doctor. I want to return to our slide on the
18 methods used at Philip Morris. We have now talked about
19 the first two on the chart, the last two are the
20 development of a denicotine cigarette, and the development
21 of non-conventional cigarettes. Do you see that?

22 A. Yes, sir.

23 Q. Are those projects specific to Philip Morris?

24 A. Yes.

25 Q. Let's talk first about the development of a

Page 3651 - Page 3654

PM3003572343

1 glycerine or propylene glycol.
 2 Q. And humectant is a moisturizer?
 3 A. Yes.
 4 Q. And if you didn't put a moisturizer in the tobacco,
 5 what would happen?
 6 A. You would have mostly dust.
 7 Q. What is another major purpose of ingredients?
 8 A. Another are called processing aides. And here we are
 9 talking about taking the different kinds of tobaccos and
 10 doing something with them.
 11 So, for example, the puff tobacco, the expanded
 12 tobacco that we talked about earlier where we used the
 13 diet process, what you called the dry ice process, that's
 14 a processing aide.
 15 The way you make that tobacco is put in carbon
 16 dioxide under pressure, release the pressure, and the
 17 tobacco puffs up like puff wheats, puff rice. And the
 18 tobacco product is gone. So the processing aide is
 19 something that is used in the making of the tobacco, but
 20 usually not found in the finished product.
 21 Q. What's another major purpose of ingredients?
 22 A. One that anybody sees in a pack of mentholated
 23 cigarettes are the flavorants added in, spices. So
 24 mentholate would be one such material, or chocolates,
 25 licorice are other types.

1 Propylene glycol is another hum
 2 a mentholated cigarette it would
 3 If it was a non-mentholated cig
 4 percent more tobacco. For thi
 5 flavors, it's .15, .2, .3 percent
 6 materials would be folded in
 7 pie.
 8 Q. So the single largest ingredient is
 9 A. Outside of tobacco.
 10 Q. Outside of tobacco?
 11 A. Yes.
 12 Q. Just to give the jury an idea of how much water you
 13 are talking about here. If it was a menthol cigarette it
 14 was of the 1.1 percent by weight. That how much menthol?
 15 A. That's about 7 milligrams. And a milligram is a
 16 thousandths of a gram, and unfortunately I weigh a hundred
 17 kilograms, which is about 230 pounds. So it's (blowing)
 18 gone if it were sitting on this table.
 19 Q. Okay. Now, based on your work at Philip Morris,
 20 evaluating ingredients, do you have any opinion as to
 21 whether the ingredients and the amounts used and in the
 22 manner used pose a health hazard to smokers?
 23 A. I have an opinion, yes.
 24 Q. Under the levels and conditions that Philip Morris
 25 uses these ingredients, do the ingredients pose a health

1 Q. If we would go and buy a cigarette off the shelf of a
 2 store today, approximately what would be the amount of
 3 tobacco in a cigarette as opposed to the amount of
 4 ingredients in a cigarette?
 5 A. Just talking about the cigarette, what we call the
 6 cigarette rod, about 88 percent of that is tobacco, 12
 7 percent are things like humectants, the flavors.
 8 Q. Okay.
 9 A. And most, most of those are humectants and sugar.
 10 The actual flavors, except for menthol, are found in
 11 absolutely minuscule amounts in a commercial product.
 12 Q. And you keep saying humectants. Those are
 13 moisturizers?
 14 A. Yes.
 15 Q. Have we prepared a chart that reflects this
 16 distribution of tobacco versus ingredients?
 17 A. Yes.
 18 Q. Okay, is that the chart?
 19 A. Yes.
 20 Q. Can you describe to the jury what's depicted on that
 21 chart?
 22 A. So this would be within the cigarette rod, you have
 23 the tobacco. So in this, in this rod, 87 and a half
 24 percent would be tobacco, about 4.9 percent water, 3
 25 percent sugars, glycerine, glycerol is a humectant.

1 hazard to smokers?
 2 A. No, they don't.
 3 Q. Let's talk about your basis for saying that.
 4 At Philip Morris, is there a method of
 5 evaluating ingredients?
 6 A. Yes.
 7 Q. And could you, just in overview, form, describe that
 8 method, and then we'll put up a chart?
 9 A. It has several different levels of approach, at a
 10 minimum 6. And the first level has to do with getting all
 11 the information that exist in a scientific world, in a
 12 regulatory world, or other sources on the material.
 13 THE COURT: Let me just ask you to hold.
 14 Would the attorneys approach once.
 15 (The following discussion was conducted at the
 16 side bar between court and counsel, out of the hearing of
 17 the jurors, as follows:)
 18 THE COURT: Let me just ask. Do you make a
 19 claim that the ingredients themselves, that the defendants
 20 wrongfully represented facts, in terms of the ingredients
 21 or is it just wrongful in the things -
 22 MR. COUGHLIN: No, I think the claim, as far as
 23 the ingredients just point to the testing, and that it was
 24 part of the gentlemen's agreement. What they did with the
 25 testing is not in the agreements.

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Page 3707	Page 3709
<p>1 THE COURT: I understood that point. I don't 2 know we need to spend time on the ingredients. We have 3 spent an awful lot of time just going over things that 4 aren't in contention. 5 MR. LOMBARDI: Judge with the ingredients, this 6 is something that came up with Davis, its come up with 7 others. 8 THE COURT: We have had discussions about 9 ingredients that were added, but I don't know that 10 anything, I don't recall anything, anybody saying that it 11 was wrongful. 12 MR. LOMBARDI: Well, but if they didn't express 13 it, they clearly said it by implication. 14 THE COURT: I don't think so. I don't want to 15 spend a lot of time on this with this witness. We have 16 spent a lot of time with this witness going over stuff 17 that isn't relevant. 18 He's given testimony on some things that are 19 major contention, but we have spent an awful lot of time 20 on things far afield. 21 MR. LOMBARDI: Can I lead him through this. 22 quickly? 23 THE COURT: Why don't you ask his general 24 opinion, and if they cross him on it you can come back. 25 Just ask him general opinion on ingredients added.</p>	<p>1 Q. Good afternoon, ladies and gentlemen. Good afternoon 2 Dr. Carchman? 3 A. Good afternoon. 4 Q. I'm looking at my notes that I wrote down, and I want 5 to make sure I wrote this down correctly. Did I understand 6 you to say that we have basically agreed that smoking 7 causes cancer? That is not new. 8 A. What I said, in response to Mr. Lombardi's question, 9 was that if one equates cause and risk, as many people do, 10 including the public health community, if that's the basis 11 for that consideration, this answer is yes. 12 Q. Do you equate cause and risk? 13 A. I equate cause and risk at two levels; it's not a 14 simple yes and no answer. 15 At one level, when I have been asked does 16 smoking cause lung cancer, my response has been possibly. 17 And when asked why it's possibly, I then come back to the 18 other pieces of the answers I gave to Mr. Lombardi that 19 dealt with the scientific proof that nobody understands 20 which constituent or constituents or the mechanism by 21 which smoking causes any disease. 22 Q. It's not necessary to know what the mechanism is in 23 order to know whether or not there is causation though, is 24 there? 25 A. From a public health perspective, you are absolutely</p>
Page 3708	Page 3710
<p>1 In fact, I think he's just testified didn't 2 cause any disease. Why don't you leave it at that until 3 they cross on it and he claims it does, and you can 4 revisit. 5 MR. LOMBARDI: Since he started the 6 steps -- 6 THE COURT: No, I think we are getting at the 7 end of the day. We have been at this for a long time. 8 MR. LOMBARDI: Okay. 9 (The following proceedings were conducted in 10 open court.) 11 BY MR. LOMBARDI: 12 Q. Doctor, based on the internal work done at Philip 13 Morris, do you have an opinion that the ingredients used in 14 Philip Morris cigarettes are safe for their use? 15 A. Yes. 16 Q. Is there anything else, in your opinion, that Philip 17 Morris could do to insure that the ingredients in 18 cigarettes are safe? 19 A. Other than what we currently do? 20 Q. Other than what you currently do? 21 A. No. 22 MR. LOMBARDI: Thank you, your Honor. 23 THE COURT: Cross examination. 24 CROSS EXAMINATION 25 BY MR. STRITMATTER:</p>	<p>1 right. From a scientific perspective I think you can't, 2 because you can't step into that, into that question 3 without being able to understand what's causing it and how 4 it's causing it. 5 Q. Is biological plausibility the tests in fact of 6 causation? 7 A. Absolutely not. 8 Q. Isn't that what the Surgeon General found was the 9 test for determining causation? 10 A. Absolutely not. 11 Q. And so you are not saying something new here today 12 when you say that basically we have agreed that smoking 13 causes cancer. That's not new. 14 A. What I have said is, given the definition that one 15 wants to use, one can make certain points. And one point 16 is if you equate causation with increased risk at that 17 level, then maybe we have agreed. 18 Q. When you retired as Vice President of Research and 19 Development and Engineering there at Philip Morris, how 20 many people were there holding comparable level positions 21 to yours? 22 A. Vice Presidents in that organization? 23 Q. Yes, sir? 24 A. Maybe a half a dozen. 25 Q. And how many people were there that held positions</p>

Page 3707 - Page 3710

PM3003572345

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Page 3711	Page 3713
<p>1 above yours?</p> <p>2 A. In Philip Morris USA, two.</p> <p>3 Q. Who is your boss?</p> <p>4 A. Dr. Jack Nelson.</p> <p>5 Q. And was Dr. Kathy Ellis won of your bosses?</p> <p>6 A. At one time she was.</p> <p>7 Q. And when did that change?</p> <p>8 A. In September of last year.</p> <p>9 Q. What was your salary in 1998 as a scientist at Philip</p> <p>10 Morris?</p> <p>11 A. I want to say about \$180,000.</p> <p>12 Q. And did you receive annual bonuses in addition to</p> <p>13 that salary?</p> <p>14 A. I received a bonus in that year, yes.</p> <p>15 Q. How much was that bonus?</p> <p>16 A. Approximately \$80,000.</p> <p>17 Q. I'm sorry?</p> <p>18 A. Approximately \$80,000.</p> <p>19 Q. And was that comparable to other bonuses that you</p> <p>20 have received?</p> <p>21 A. Yes.</p> <p>22 Q. Did you also receive stock options?</p> <p>23 A. Not last year.</p> <p>24 Q. How much do you own in stock options in Philip Morris</p> <p>25 stock that you have been provided as compensation?</p>	<p>1 they have smoked?</p> <p>2 A. Yes..</p> <p>3 Q. Smokers who inhale have a higher risk than smokers</p> <p>4 who don't inhale, true?</p> <p>5 A. True.</p> <p>6 Q. Former smokers have a declining risk as compared with</p> <p>7 current smokers, true?</p> <p>8 A. In general, that's true.</p> <p>9 Q. And the longer a person quits, the more the risk goes</p> <p>10 down in direct proportion to the length of time they have</p> <p>11 quit smoking. Isn't it that true?</p> <p>12 A. After a certain period of time, yes.</p> <p>13 Q. Now, would you agree that life expectancy of any</p> <p>14 smoker at any age is significantly shortened compared to</p> <p>15 non-smokers?</p> <p>16 A. I have read numbers to take effect, but I have not</p> <p>17 evaluated those numbers. I have seen them reported, yes.</p> <p>18 Q. Have you seen the Surgeon General's report that says</p> <p>19 a 30 year old two pack a day smokers has a life expectancy</p> <p>20 of 8 or the 9 years shorter than a non-smoker?</p> <p>21 A. I believe I have read that.</p> <p>22 Q. And mortality rates are higher for those who started</p> <p>23 smoking at younger ages than at later ages, isn't that</p> <p>24 true?</p> <p>25 A. Yes.</p>
Page 3712	Page 3714
<p>1 A. I have approximately 20,000 shares in options.</p> <p>2 Q. Now, you do agree that smoking is a risk factor?</p> <p>3 A. Yes.</p> <p>4 Q. What is the risk factor for male smokers getting lung</p> <p>5 cancer as compared to non-smokers?</p> <p>6 A. Where?</p> <p>7 Q. In the United States?</p> <p>8 A. Anywhere from 10 to 20.</p> <p>9 Q. Would you agree that's a very high risk?</p> <p>10 A. Yes, sir.</p> <p>11 Q. Studies have shown that there is a lot more risk than</p> <p>12 just comparing a smoker to a non-smoker, hasn't there been?</p> <p>13 A. I'm not sure I understand your question.</p> <p>14 Q. Well, for instance, there have been studies that show</p> <p>15 that heavy smokers have a higher risk than light smokers; a</p> <p>16 dose response, isn't that true?</p> <p>17 A. You mean by heavy smokers, the more they smoke?</p> <p>18 Q. Yes?</p> <p>19 A. Yes.</p> <p>20 Q. So someone who smokes two packs of cigarettes a day</p> <p>21 has a higher risk than someone who's smoking one pack a</p> <p>22 day?</p> <p>23 A. Possibly yes.</p> <p>24 Q. Longer term smokers have a higher risk than short</p> <p>25 term smokers. And that's directly proportional to the time</p>	<p>1 Q. And these same results have been found in many</p> <p>2 different populations, haven't they?</p> <p>3 A. The same other observations in general for many</p> <p>4 different populations, yes.</p> <p>5 Q. They have been found not only in this country but</p> <p>6 other countries?</p> <p>7 A. Qualitatively speaking, yes.</p> <p>8 Q. And they have been found in different aspects of our</p> <p>9 total population?</p> <p>10 British physicians have been studied, and these</p> <p>11 risk have been found?</p> <p>12 A. These risk have been found.</p> <p>13 Q. And American veterans?</p> <p>14 A. Yes.</p> <p>15 Q. Would you agree that in fact every major scientific</p> <p>16 organization in the world has found that smoking causes</p> <p>17 cancer?</p> <p>18 A. I'm not sure I understand what you mean. Major</p> <p>19 scientific organization has found?</p> <p>20 Q. Yes, sir?</p> <p>21 A. I'm not sure I understand your question.</p> <p>22 Q. That they have made public pronouncements finding</p> <p>23 that smoking does cause cancer?</p> <p>24 A. I would say there are selected scientific</p> <p>25 associations that have taken positions on smoking and</p>

Page 3711 - Page 3714

PM3003572346

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Page 3715

Page 3717

1 health, yes.
 2 Q. Are you aware of any major scientific organization
 3 that has not found that smoking causes cancer?
 4 A. I can list several major scientific organizations
 5 that have been silent, have not taken a position on that
 6 question, yes.
 7 Q. You worked with the National Cancer Institute?
 8 A. Yes.
 9 Q. And have they made a pronouncement and found that
 10 smoking causes cancer?
 11 A. Yes.
 12 Q. How many employees were there in the Research
 13 Department at Philip Morris when you were there?
 14 A. Over 600.
 15 Q. And you indicated that the assumption there, at least
 16 your assumption, and I want to explore this for a moment,
 17 is that smoking does cause diseases in your working
 18 hypothesis there, is that correct?
 19 A. Yes.
 20 Q. Was that also the hypothesis of all the scientists
 21 that worked there?
 22 A. I couldn't possibly speak for all the scientists. I
 23 can only speak for those scientist that I had a personal
 24 knowledge of. And I would say the answer is probably yes.
 25 Q. And did they also have a personal scientific belief

1 there is a controversy as to whether or not smoking causes
 2 disease?
 3 A. I've heard these arguments, in terms of the
 4 controversy. All I can say, based upon my interactions
 5 with the people at Philip Morris, there is a clear
 6 recognition that smoking is a risk factor for lung cancer
 7 and a variety of other diseases.
 8 The controversy, if that's what you want to
 9 call it, and I can't speak for any other company, is the
 10 difference between the answer to the question I gave
 11 Mr. Lombardi about cause and risk and scientific proof.
 12 And therein lies the major difference; the fact that there
 13 is a lack of scientific proof. If there was scientific
 14 proof then the position would be different.
 15 Q. And do you think it is an appropriate for the
 16 obligation of Philip Morris to its own consumers to
 17 maintain that controversy and that argument?
 18 A. I'm sorry, you were using the word controversy and
 19 maintaining it.
 20 I believe in at least 1997 there was a letter
 21 transmitted to Senator Hatch in which I believe it was
 22 Mr. Vivo, the Chairman of Philip Morris basically said,
 23 we'll not, as a matter of course, dispute or undermine the
 24 public health messages at all. And we would primarily
 25 only talk about this in situations such as this where we

Page 3716

Page 3718

1 that smoking caused cancer?
 2 A. I don't know the answer to that question.
 3 Q. Was any poll or study ever done to make that
 4 determination?
 5 A. Not that I'm aware of.
 6 Q. Has Philip Morris ever told its customers that it's
 7 working hypothesis in its own research laboratories is that
 8 smoking does cause disease?
 9 A. Not that I'm aware of.
 10 Q. Would you agree that the relative risks for emphysema
 11 from smoking is also high?
 12 A. It is elevated, yes.
 13 Q. It's over 5?
 14 A. Yes.
 15 Q. And you would consider that to be high?
 16 A. Yes.
 17 Q. Would you agree that the relative risk for other
 18 cancers is high, other than lung cancer?
 19 A. Yes.
 20 Q. Would you agree that the relative risk of chronic
 21 obstructive pulmonary disease from smoking is high?
 22 A. Based on the Eppy studies, the association gives a
 23 risk number that is high, yes.
 24 Q. And yet you are aware that Philip Morris and the
 25 entire industry, other than Liggett, has continued to claim

1 are trying to defend ourselves either in litigation or
 2 regulatory environment where the science supports the
 3 argument.
 4 Q. And hasn't that in fact been the crux of Philip
 5 Morris's position all along over many years, that is they
 6 needed to do this in order to try to maintain a defense for
 7 litigation purposes?
 8 A. You are asking the wrong person. I'm not a lawyer,
 9 I'm clearly involved in litigation here, I have no
 10 training, no background, and no real interest, to be frank
 11 with you.
 12 So you are asking the wrong person the answer
 13 to that question.
 14 Q. And you did not see the documents to that effect from
 15 Philip Morris when you did the research?
 16 A. Which documents are you referring to.
 17 Q. Indicating that the reason for taking such a position
 18 was to maybe maintain a defense for litigation purposes?
 19 A. I have seen documents as a result of litigation that
 20 speak to or purport to speak to those points, yes.
 21 Q. I mean, before any litigation, that they needed to do
 22 this as a defensive posture before any litigation?
 23 A. I'm sorry, I'm not being clear. What I'm saying, I
 24 was not aware of those documents until I got involved in
 25 litigation.

Page 3715 - Page 3718

PM3003572347

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Page 3719	Page 3721
<p>1 Q. I'm sorry, I misunderstood you.</p> <p>2 Let me direct your attention to some internal</p> <p>3 documents that have been found at Philip Morris.</p> <p>4 Would you show us Exhibit 114, please.</p> <p>5 This is Exhibit 114. It's a July 20th, 1956</p> <p>6 document to, among others, O. P. McComas. Do you know</p> <p>7 that he was the President of the company?</p> <p>8 A. I did know that, yes.</p> <p>9 Q. And referring to the highlighted language there it</p> <p>10 says, decreased carbon monoxide and nicotine are related to</p> <p>11 decreased harm to the circulatory system as a result of</p> <p>12 smoking.</p> <p>13 Do you see that?</p> <p>14 A. Yes.</p> <p>15 Q. Was this a finding that Philip Morris had back in</p> <p>16 1956 about the dangers of carbon monoxide to those who</p> <p>17 purchased and used their products?</p> <p>18 A. This 40 something year old document I have not seen</p> <p>19 outside of litigation, nor have I seen anything that would</p> <p>20 suggest to me that scientifically Philip Morris knew this.</p> <p>21 Q. You are not aware of what scientific work they did in</p> <p>22 order to make this determination as stated here?</p> <p>23 A. In 1956?</p> <p>24 Q. Yes, sir.</p> <p>25 A. No, sir.</p>	<p>1 Now, is that what you are saying today also?</p> <p>2 A. Absolutely not.</p> <p>3 Q. Then I misunderstood you before, because I thought</p> <p>4 you said it was a question of definition?</p> <p>5 A. It's a question of perspective. If I'm a public</p> <p>6 health official, I don't need to necessarily cross every T</p> <p>7 and dot every I to take a position.</p> <p>8 If you are a scientist, then you have a</p> <p>9 different, different position based on a different set of</p> <p>10 learnings and understandings and responsibilities.</p> <p>11 Q. Aren't the scientists at Philip Morris concerned</p> <p>12 about the health of their customers?</p> <p>13 A. Very much so.</p> <p>14 Q. Let's refer to Exhibit 250. This is a report dated</p> <p>15 March 15, 1961 that was done by Arthur D. Little?</p> <p>16 MR. LOMBARDI: Your Honor, excuse me. This is</p> <p>17 not a Philip Morris document. It's Arthur D. Little, and</p> <p>18 it relates to limits to be discussed previously.</p> <p>19 MR. STRITMATTER: This is a document received</p> <p>20 from Philip Morris. It is in their records, your Honor.</p> <p>21 THE COURT: Finding for counsel's</p> <p>22 representations to that effect, and you can check that</p> <p>23 out. If you find that out not to be true, you can bring</p> <p>24 it to our attention. But upon counsel's representation</p> <p>25 I'll allow questioning.</p>
Page 3720	Page 3722
<p>1 Q. This does indicate that they had that knowledge</p> <p>2 internally, doesn't it?</p> <p>3 A. Well, you are showing me one highlighted section of a</p> <p>4 document, the sides of which -- I don't know, I've never</p> <p>5 seen this document before outside of litigation. So it's</p> <p>6 not, it wouldn't be fair for me to, I have no basis for</p> <p>7 answering your question.</p> <p>8 Q. You have looked at this document in conjunction with</p> <p>9 litigation, haven't you?</p> <p>10 A. Yes, I have.</p> <p>11 Q. And it was suggested to you that this would be a</p> <p>12 document that would be shown for today, isn't it?</p> <p>13 A. Yes, I saw it within the last day or two.</p> <p>14 Q. Let me refer you to Exhibit 213.</p> <p>15 This is a September 22, 1959 document by Dr.</p> <p>16 Wakeham. He was the research director?</p> <p>17 A. In 1959 he was probably the Vice President of</p> <p>18 Research and Development. He was the head of R and D.</p> <p>19 Q. All right, sir. And he speaks of the title of the</p> <p>20 document is "An Opinion on Cigarette Smoking and Cancer".</p> <p>21 correct?</p> <p>22 A. Yes.</p> <p>23 Q. And referring to the highlighted language it says,</p> <p>24 whether or not cigarette smoking is a cause of lung cancer</p> <p>25 is a matter of definition.</p>	<p>1 BY MR. STRITMATTER:</p> <p>2 Q. In reviewing the records of Philip Morris, did you</p> <p>3 come across this document?</p> <p>4 A. I might have, but I believe I became aware of this in</p> <p>5 terms of recognizing this as in the course of litigation.</p> <p>6 Q. The Arthur D. Little Company was a respected company,</p> <p>7 was it not?</p> <p>8 A. Still is.</p> <p>9 Q. And was in '61 and still is today?</p> <p>10 A. Yes.</p> <p>11 Q. They say there are biologically active materials</p> <p>12 present in cigarette tobacco, these are cancer causing,</p> <p>13 cancer promoting.</p> <p>14 That was information that was given to Philip</p> <p>15 Morris as early as 1961 by Arthur D. Little, wasn't it?</p> <p>16 A. This is publicly available information in 1961. I</p> <p>17 mean, it wasn't news to Arthur D. Little, nor was it news</p> <p>18 to Philip Morris.</p> <p>19 Q. Did Philip Morris ever tell its customers that in</p> <p>20 fact there are biologically active materials present in</p> <p>21 cigarette tobacco, and these are cancer causing or cancer</p> <p>22 promoting?</p> <p>23 A. I don't believe so.</p> <p>24 Q. Do you know why they didn't do that?</p> <p>25 A. Actually, I think I have some sense of what was going</p>

Page 3719 - Page 3722

PM3003572348

1 on, if I can try to answer your question. I mean, this is
2 clearly almost 40 years before my time with the company,
3 but I have given some thought to this, and I go back, at
4 least in my mind, to 1954, and something called the frank
5 statement, which Philip Morris was a participant or
6 co-signer of.

7 And I look at that document from the
8 perspective, and it's a two part document. In my mind,
9 being on the left side of the document these folks
10 basically say this is what we believe. And I believe, I
11 think at the time what they said was probably true, in
12 terms of the scientific information and understanding.

13 On the right side of the document they
14 basically say, we are really not sure what's going on with
15 our product, but we are going to set up some mechanism to
16 find and investigate this.

17 And that was, in part, a result of the two Eppy
18 studies and some of the other Eppy studies.

19 You talked about the veterans. If you had
20 these studies, the British Physician, the Wynder
21 publications, and probably also stimulated in no small way
22 by Professor Wynder's mouse skin painting study where he
23 took a condensate from tobacco smoke and painted it on the
24 back of mice and showed that condensate produced cancer on
25 those mice and then talked about some of the things that

1 might be in that condensate, that could be responsible for
2 this.

3 So 1961, this information was out there, at
4 least to me the frank statement speaks to some
5 acknowledgement that there is a potential problem out
6 there and we need to do something. But the kinds of things
7 that are on here, was, was clearly not new.

8 In 1959 the American Cancer Society launched
9 what, at the time, was the largest Eppy study of its time.
10 A million people.

11 Cancer study number 1, at that point they were
12 starting in 1959, saying to themselves we need to look at
13 this big time in the United States. So I don't see
14 anything new here that wasn't publicly available at least
15 in the scientific literature I'm aware of.

16 Q. We know what the industry did publicly with its frank
17 statement did it put out a retraction or explanation of its
18 frank statement when it learned this information?

19 A. You mean when the UK government started to make
20 statements about risk of smoking; in '64 when the US
21 Surgeon General came out and had that first report on
22 smoking and health?

23 I think the answer is no. I think at that time
24 it clearly became the purview of the health authorities
25 around the world, including the US Surgeon General, and

1 the United States was speaking loudly and clearly to the
2 issues of smoking and health.

3 Q. Well, first my question was, when Philip Morris
4 learned this, did they let their customers know, or let the
5 public know, because you are suggesting they knew it before
6 1961. Did they do so?

7 A. What I'm suggesting was this was publicly available
8 information before 1961.

9 Q. And when the Surgeon General came out in 1964 and
10 said that smoking causes lung cancer in males, the industry
11 disputed that and created a controversy over the issues,
12 didn't they?

13 A. Well, let's try and be specific in terms of what the
14 Surgeon General specifically said, and what the underlying
15 causality arguments that the Surgeon General used in that
16 '64 document, because they spent a lot of time in the
17 causality section talking about what causality meant.

18 And in the following year Bradford Hill
19 published another article on causality. And when I looked
20 in a most recent WHO book called Basic Epidemiology
21 sponsored by the World Health Organization. I was somewhat
22 surprised that was 1993, somewhat surprised that they were
23 still raising some of the concerns about causality.

24 It comes down from 1964, the US surgeon
25 General's report to at least 1993 and probable today that

1 it ends up being a value judgment a value judgment in
2 terms of whether something is causal or not especially, as
3 it relates to something as complicated as a smoking
4 related disease if we are talking about an effective type
5 agent and process it's a different story I here it's a
6 Lorain lots more complicate the do so this controversy
7 that you keep using and I've heard it before, I think one
8 has to really look at what the US surgeon General said and
9 why they said it.

10 Q. When you say it was a value judgment, do you think in
11 consideration of values that the tobacco industry and
12 Philip Morris specifically, in weighing those values,
13 should have been considering what the health risks were for
14 its customers?

15 A. Actually the questions and answers in my direct, I
16 thought, provided to me, when I reviewed it and was
17 involved in it, some pretty compelling arguments that
18 Philip Morris was working very hard to try to address the
19 public health concerns that had been laid out over the last
20 35 years.

21 Q. Let's go to 417, please.

22 This is a Philip Morris report entitled smoking
23 and health significance of the report of the Surgeon
24 General's Committee to Philip Morris, Incorporated.

25 Go to the third page, please. This is dated

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Page 3727	Page 3729
<p>1 Februar / 18 of 1964. And this was done by Dr. Wakeham, 2 wasn't it? 3 A. Yes. 4 Q. All right, sir, and he says under his summary the 5 onus of proof has been moved by the report from its usual 6 position with the industries accusers to the tobacco 7 industry itself. Positive programs to cure ills cited in 8 this report, whether real or alleged, are recommended as 9 little basis for disputing the findings at this time has 10 appeared. 11 Did Philip Morris tell it's customers and the 12 public that there was little basis for disputing the 13 findings of the Surgeon General in 1964? 14 A. No, it did not. 15 Q. And in fact, it did just the opposite, didn't it? 16 A. I don't know. It could have. I was 11 years old at 17 the time. 18 Q. And you have not seen in your research of the 19 documents of Philip Morris then, about the publications 20 they put out and the information they put out about a 21 controversy in this area? 22 A. I made a mistake. I was 21 at the time. 23 Q. I wasn't going to call you on that. 24 A. Thank you. 25 Q. Let's go to Exhibit 553, please. This is dated</p>	<p>1 familiar with it, okay? 2 A. Thank you. 3 Q. Let's move on to Exhibit 743, the cover letter by Dr. 4 Wakeham dated January 10, 1969 and it relates to smoking 5 and baby weight. 6 Are you aware of the fact that Philip Morris 7 was looking at the issues of what the effects were of 8 smoking were on pregnant woman? 9 A. I wasn't specifically aware of it but it doesn't 10 surprise me. 11 Q. Dr. Wakeham's cover letter says: Now we have a study 12 of the effect of smoking in pregnancy which supports 13 previous conclusions that smoking mothers produce smaller 14 babies. The position of the medical people is that smaller 15 babies suffer detriment effects all through life. 16 For example, in identical twins, the smaller 17 one at birth has lower intelligence test scores at age 10. 18 Now this was information that Philip Morris had 19 in 1969? 20 MR. LOMBARDI: Objection, under the rule of 21 completeness, I ask the witness be shown the next page of 22 the document. 23 MR. STRITMATTER: I'm going to go to it. I'll 24 go to it now and then can the question. 25 Q. Going to the second page, as this is a report from R.</p>
Page 3728	Page 3730
<p>1 October 25, 1966, project 600 regarding physiological 2 studies. And it was done by P. C. Luxinger. 3 Now he was a physician, wasn't he? 4 A. I do not know. He was long gone before I came to the 5 company. I don't know what his background was. 6 Q. You are not aware of the contents of this report? 7 A. I have seen the contents but I was not aware of his 8 background. 9 Q. He was an individual that was asked to do some 10 outside research as opposed to having research done 11 in-house there at Philip Morris? 12 A. Possibly. I mean, I'm not that familiar with this 13 document. 14 Q. Turn to page 6, please. He makes a finding, does he 15 not, that available information from these studies 16 indicates that gross lung pathology can be induced by 17 smoking cigarettes. 18 What does that mean, gross lung pathology? 19 A. You have to refresh my memory, in terms of, is this 20 an animal study, a human study? I apologize, I just don't 21 recall. 22 Q. Quite all right. 23 It is my understanding that it was an animal 24 study, Dr. Carchman. 25 Let me withdraw the question if you are not</p>	<p>1 Fagan to Dr. Wakeham of this study, paragraph 3, sub (a). 2 Mothers who smoked had a lower blood pressure than most who 3 didn't smoke. Mothers who smoke have a higher percentage 4 of unsuccessful pregnancies, paren, abortion, stillborn, 5 and neonatal deaths, end paren. 6 And under sub (c). Non-smoking mother has a 7 heavier baby than the mother who smokes. 8 And then the next page. 9 MR. LOMBARDI: Can we look at the "re" line of 10 that page. 11 MR. STRITMATTER: Of which one? 12 MR. LOMBARDI: Of the one you were just on. 13 MR. STRITMATTER: I don't know what you mean. 14 Q. Yes, up at the top of the page, please. It refers to 15 smoking and pregnancy, a prospective study done in Britain 16 from the British Journal in 1968, correct? 17 A. Yes. 18 Q. And this was information then that Philip Morris 19 secured with regard to what the effects were on pregnant 20 women from smoking? 21 A. Publicly available probably a peer review medical 22 article. 23 Q. And did Philip Morris do anything to notify it's 24 customers with regard to what these effects were? 25 A. I'm not aware of the fact of whether they did or</p>

Page 3727 - Page 3730

PM3003572350

1 didn't.

2 Q. Going to the last page of the exhibit. It says the
3 lower birth rate of babies born to smoking mothers is
4 attributed to the tobacco effects of smoke, particularly
5 the carbon monoxide.

6 That goes back to the 1956 document that we
7 started here, doesn't it, Dr. Carchman, and the effects of
8 carbon monoxide and effects on people who smoke
9 cigarettes?

10 A. That particular document I'm trying to remember is
11 relating smoke to cardiovascular disease.

12 Q. It did, sir.

13 A. And so if I can make two points, both on this and the
14 previous document, the '56 document you are referring to.

15 Q. Go ahead.

16 A. Both carbon dioxide and nicotine over the years have
17 been implicated with a variety of adverse health effects
18 for the cardiovascular system. Initially nicotine was felt
19 to be playing a very important role. The public health
20 community no longer accepts that.

21 Then that was followed by carbon monoxide in
22 cardiovascular disease. The tobacco community doesn't
23 accept that they have a new theory, a new idea about what
24 in smoke is basically important, in terms of
25 cardiovascular disease. And it's called something called

1 free radicals. It's a special kind of chemical nobody
2 knew about that way back then.

3 My point here, what was discussed in '56 was
4 felt to be true in '56 is not true today.

5 With regard to smoking and low birth babies,
6 this is an area that I have a particular interest in and
7 one of great importance. I think the current data
8 continues to support the notion that women who smoke have
9 lower birth weight babies by a few grams. It's a small
10 amount but I think it is a real and significant finding.

11 In here, where the discussion talks about
12 carbon monoxide, I do not believe any scientist or public
13 health official working in the area would accept this as
14 anywhere near being the correct argument.

15 Again, it may have been true at the time as
16 evidenced by what the medical community felt, it's no
17 longer felt to be a true important causal factor in low
18 birth weight babies.

19 Q. What is it that Philip Morris did to follow up on
20 this study to do its own work with regard to this issue of
21 how smoking was going to affect pregnant mothers?

22 A. I think when it comes to specifically looking at
23 human beings and smoking and health, Philip Morris has
24 deferred to the National Institutes of Health and other
25 government agencies. When it comes to supporting basic

1 research to get at mechanisms, wherever possible, Philip
2 Morris either directly or indirectly has tried to support
3 such research. This is a very complex and difficult area
4 and I think only recently have disciplines such as what's
5 called placental toxicology sort of risen up.

6 And there are a few experts in the world in
7 this particular area. I agree, it is an important area,
8 it's one that I'm interested in, I know the company is
9 interested in, but I think given the scientific
10 limitations we have done what I think was possible for us
11 to do and that the health agencies have an ability to do
12 much more than we could possibly ever do.

13 Q. How much money has Philip Morris spent on studying
14 the issue of how smoking affects pregnant women and their
15 babies?

16 A. I can't give you an answer to that question.

17 Q. Go to exhibit 952 please.

18 This is a December 8, 1970 document from Dr.
19 Wakeham to Will J. F. Cullman the III.

20 Was he President of the company at that time?

21 A. He was either President or CEO. He was a very high
22 company official.

23 Q. And the subject is best program for CTR?

24 A. Yes.

25 Q. And looking at the highlighted portions, it says it

1 has been stated that CTR has a program to find out, quote,
2 "the truth about smoking and health," end quote. What is
3 truth to one is false to another. CTR and the industry
4 have publicly and frequently denied what others find as
5 truth.

6 Now does that denial, does that relate to the
7 controversy or the denial by Philip Morris and the tobacco
8 industry that smoking causes disease?

9 A. I actually have looked at this document and a reading
10 of the complete document. What Dr. Wakeham is offering up
11 here is a menu of possible avenues that would be associated
12 with support, continued support, or dissolution of CTR.

13 So this is just one of the -- if I remember
14 correctly -- one of the things that he's talking about and
15 the industry has publicly and frequently denied what
16 others find as truth.

17 I mean, when I read this, I was somewhat
18 startled and disturbed but Mr. Cullman is not a scientist,
19 Dr. Wakeham is a scientist. So my being disturbed about
20 it, there was nothing I could do at this point. This was
21 a document that was prepared way before my time and in an
22 environment I wasn't in. But there are some words in here
23 that as they stand are somewhat disturbing. But I can't
24 put them in context.

25 Q. Wouldn't you expect a scientist to be looking for the